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SUMMARIES

Result No.

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SEQUENCE FROM N.A.

MEDLINE=99343613; PubMed=10413621;

Macey J.R., Schulte J.A. II, Larson A., Tuniyev B.S., Orlov N.,

Papenfuss T.J.;

"Molecular phylogenetics, tRNA evolution, and historical biogeography in anguid lizards and related taxonomic families.";

Mol. Phylogenet. Evol. 12:250-272(1999).

EMBL; AF085623; AAD51559.1; -.

Mitochondrion.

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Mitochondrion.
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi
Lepidosauria, Squamata, Scleroglossa, Anguimorpha, Varanidae, Val
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Mitochondrion.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Lepidosauria; Squamata; Scleroglossa; Anguimorpha; A
Ophisaurus.
NCBI_TaxID=102191;
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                 01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
Cytochrome c oxidase subunit I (Fragment).
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Mismatches
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ilarity 80.0%;
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1239 MW;
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"Mitochondrial DNA evidence
Cladistics 17:0-0(2001).
EMBL; AF407492; AAL10031.1;
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larity 60.0%;
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T 01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
E Cytochrome c oxidase subunit I (Fragment).
N CO1.
S Eremias grammica.
Mitochondrion.
S Mitochondrion.
C Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
C Lepidosauria; Squamata; Scleroglossa; Scincomorpha; Lacertoidea;
Lacertidae; Eremias.
N NCBI TaxID=52179;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi
Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Va:
NCBI TaxID=169843;
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MEDLINE=97153826; PubMed=9000757;
Macey J.R., Larson A., Ananjeva N.B., Fang Z., Papenfuss
"Two novel gene orders and the role of light-strand repl
rearrangement of the vertebrate mitochondrial genome.";
Mol. Biol. Evol. 14:91-104(1997).
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MEDLINE=97153820; PubMed=9000751;
Macey J.R., Larson A., Ananjeva N.B., Papenfuss T.J.;
"Replication slippage may cause parallel evolution in structures of mitochondrial transfer RNAs.";
Mol. Biol. Evol. 14:30-39(1997).
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oxidase subunit I (Fragment).
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"Mitochondrial DNA evidence
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EMBL; AF407507; AAL10075.1;
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Jennings M., Larson A.;
"Molecular Phylogenetics of Western North American Frogs of
boylii Species Group.";
Mol. Phylogenet. Evol. 19:131-143(2001).
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MEDLINE=21184280; PubMed=11286498;
Macey J.R., Strasburg J.L., Brisson J.A., Vredenburg V.T.,
                                                                                                                           SEQUENCE FROM N.A.
MEDLINE=21184280; PubMed=11286498;
Macey J.R., Strasburg J.L., Brisson J.A., Vredenburg V.T.
Jennings M., Larson A.;
"Molecular Phylogenetics of Western North American Frogs
boylii Species Group.";
Mol. Phylogenet. Evol. 19:131-143(2001).
EMBL, AF314018; AAK56874.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea;
NCBI_TaxID=8400;
                                     Rana temporaria (European common frog).
Mitochondrion.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea;
NCBI_TaxID=8407;
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I (Fragment).
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01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Cytochrome c oxidase subunit I (Fragment).
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1354 MW;
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Amphibia; Batrachia; Caudata; Salamandroidea; Salamandridae;
Notophthalmus.
NCBI_TaxID=8316;
    01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
XMeisl-4 protein (Fragment).
Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus.
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MEDLINE=21175761; PubMed=11277635;
Weisrock D.W., Macey J.R., Ugurtas I.H., Larson A., Papenfuss T. Weisrock D.W., Macey J.R., Ugurtas I.H., Larson A., Papenfuss T. Molecular Phylogenetics and Historical Biogeography among Salamandrids of the 'True' Salamander Clade: Rapid Branching of Numerous Highly Divergent Lineages in Mertensiella luschani Asswith the Rise of Anatolia.";
Mol. Phylogenet. Evol. 18:434-448(2001).
EMBL; AF296616; AAK30305.1; -.
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MEDLINE=97202105; PubMed=9049632;
Steelman S., Moskow J.J., Muzynski K., North C., Druck
Steelman S., Moskow J.J., Muzynski K., North C., Druck
Montgomery J.C., Huebner K., Daar I.O., Buchberg A.M.;
Montgomery J.C., Huebner K., Daar I.O., Buchberg A.M.;
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O1-JUN-2001 (TrEMBLrel. 17, Created)
O1-JUN-2001 (TrEMBLrel. 17, Last sequence update)
O1-JUN-2001 (TrEMBLrel. 17, Last annotation update)
Cytochrome c oxidase subunit 1 (Fragment).
COI.
Notophthalmus viridescens (Eastern newt) (Triturus Mitochondrion.
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EMBL; U68389; AAB19199.1; -
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American Frogs

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Eukaryota; Metazoa; Ch
Amphibia; Batrachia; A
NCBI_TaxID=160496;
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Amphibia; Batrachia;
NCBI_TaxID=45438;
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Macey J.R., Strasburg J.L., Brisson J.A., Vredenburg V.'Jennings M., Larson A.;
"Molecular Phylogenetics of Western North American Frogiboylii Species Group.";
Mol. Phylogenet. Evol. 19:131-143(2001).
EMBL; AF314022; AAK56886.1; -.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea;
NCBI_TaxID=69834;
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Pred. No. 1.5e+03;
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                                                                               MEDLINE=21184280; PubMed=11286498;
Macey J.R., Strasburg J.L., Brisson J.A., Jennings M., Larson A.;
"Molecular Phylogenetics of Western North boylii Species Group.";
Mol. Phylogenet. Evol. 19:131-143(2001).
EMBL; AF314020; AAK56880.1; -.
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                                                                              Macey J.R., Strasburg J.L., Brisson J.A., Jennings M., Larson A.;
"Molecular Phylogenetics of Western North boyli Species Group.";
Mol. Phylogenet. Evol. 19:131-143(2001).
EMBL; AF314017; AAK56871.1; -.
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Jennings M., Larson A.;
"Molecular Phylogenetics of Weboylii Species Group.";
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Burkitt's IgM lambda

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AAR60400-73 are peptide ligands which bind to purified Igm lambda receptor of the human Burkitts's lymphoma cell line SUP-BB.Peptides AAR60414 to AAR60473 were biotinylated and linked to streptavidin. The peptides were identified with the use of filamentous phage libraries displaying random peptides. Corresponding synthetic peptides bound specifically to this Ig receptor, and blocked the binding of an anti-idiotype antibody. The ligands, when conjugated to form dimers or tetramers, induced cell death by apoptosis in vitro at nanomolar concentrations. This effect was associated with the specific stimulation of intracellular protein tyrosine phosphorylation. The peptides of the invention can be used individually, as complexes of cross-linked peptides or can be conjugated to deliver toxins or radionuclides to neoplastic cells bearing the specific Ig
                                                                                                                                       anergy; modulate tyrosine kinase
                                                                       antiproliferative; transplant; B-cell lymphoma line SUP-BB; Burkitt inhibit clonal expansion; induce apoptosis; anti-idiotype; IgM lambinhibit cell proliferation; peptidomimetics; cell surface receptor; immunoglobulin superfamily; treatment; neoplasia; identification; induce replication; therapy; clonal anergy; modulate tyrosine kinase
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                                             lymphoma
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                                            Antiproliferative peptide to transplantable human B-cell
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activation, transcription, apoptosis, proliferative disorder;
psoriasis, restenosis.
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                                                                                                                                                                                                                                                                                entry)
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Best Local Similarity 100
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptides binding to and inhibiting cell
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                                                        Similarity 4; Conserv
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Best Local S
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AAR60414 to AAR60473 were biotinylated and linked to streptavidin.

The peptides were identified with the use of filamentous phage
libraries displaying random peptides. Corresponding synthetic

peptides bound specifically to this Ig receptor, and blocked the binding of an anti-idiotype antibody. The ligands, when conjugated to form dimers or tetramers, induced cell death by apoptosis in vitro at nanomolar concentrations. This effect was associated with the specific stimulation of intracellular protein tyrosine phosphorylation. The peptides of the invention can be used individuall as complexes of cross-linked peptides or can be conjugated to deliver toxins or radionuclides to neoplastic cells bearing the specific Ig
                  itt's;
                                ambda;
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             antiproliferative; transplant; B-cell lymphoma line SUP-BB; Burkitt's inhibit clonal expansion; induce apoptosis; anti-idiotype; IgM lambda inhibit cell proliferation; peptidomimetics; cell surface receptor; immunoglobulin superfamily; treatment; neoplasia; identification; induce replication; therapy; clonal anergy; modulate tyrosine kinase.
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                                                                                                                                                                                                                                                                                                                                                               Identifying anti-proliferative peptide(s) which specifically bind
to immunoglobulin super-family species idiotype - esp. to inhibit
B-cell lymphoma and leukocytic leukaemia cell proliferation, for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Toxic shock; blood endotoxin removal; serum; diagnostic reagent; cytokine release control; treatment; pertussis; bacterial meningi HIV related infections; polymyxin B; Group II.
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Mismatches 1;
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                                                                                                                                                                                                                                                                                                           Renschler MF;
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Pred. No.
                                                                                                                                                                                                                                                                             JUNIOR
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LELAND STANFORD
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ilarity 80.0%;
Conservative
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93US-0153341
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                                                                                                                                                                                                                                                                                                                                                                                                       anti-idiotype therapy
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UNIV LEL
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15-NOV-1993;
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                                                                                                    Synthetic.
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(STRD )
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50mg/kg and is relatively unstable
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                                                                                                                                                                                                                                                                                                                                                             The (Group II) peptide is an example of a generic peptide of for R-(Lys/Arg/His - Phe/Tyr/Trp - Leu/Ile/Val )n-R, where n = 1-10 and each R is H, an amino acid residue or a fatty acid residue. The peptide is useful for treating or preventing septic shock, mixing with polymyxin B to reduce its toxicity; removing endotoxins from blood, sera or other fluids (in vivo or in vitro); controlling release of cytokines induced by endotoxins; as diagnostic reagents to detect and quantify toxins in blood or sera; preparing non-toxic antigenic complexes of lipid A or lipopolysaccharide (LPS); and for treating pertussis, bacterial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         meningitis and HIV-related infections. The usual dose is 10-100 ug/kg/day, given parenterally. It binds to the same sites as polymyxin B, i.e. it inhibits all the toxic effects of lipid A. has no antibiotic activity; does not lyse erythrocytes; has no toxicity in mice when injected at 50mg/kg and is relatively unst
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and for treating pertussis, bacterial
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                                                                                                                                                                                                                                                                                of toxic shock
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                                                                                                                                                                                                                                                                               New peptide for treatment or prevention of toxic
specified sequences of aminoacid(s) and analogs
comprising sequences retro-orientated
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Location/Qualifiers
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100.0%; P.
                                                                                                                                                                                                                                                                                                                                        Example; Page 5; 39pp; English.
                                                    "repeat
                                                                                                                                                                  91US-0658744
                                                                                                                                       92ZA-0000943
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Modified-site
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Best Local
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           Region
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                                                                                                                                                                                                                                                                                                                                                                                            The patent discloses the following new peptides, which are opioids which bind specifically to the mu receptor: Ac-Phe-Arg-Trp-Trp-Tyr-Xaa-NH2 (1);

Ac-Arg-Trp-Ile-Gly-Trp-Xaa-NH2 (2); Trp-Pro-Lys-His-Xaa-NH2 (3);

Trp-Trp-Pro-Xaa1-NH2 (4); Tyr-Pro-Phe-Gly-Phe-Xaa-NH2 (5);

Trp-Trp-Pro-Xaa1-NH2 (4); Tyr-Pro-Phe-Gly-Phe-Xaa-NH2 (5);

D-Ile-D-Met-D-Ser-D-Trp-Gly-Xaa2-NH2 (6);

D-Ile-D-Met-D-Trp-Gly-Xaa2-NH2 (7); Tyr-A1-B2-C3-NH2 (214);

C D-Ile-D-Met-D-Trp-Gly-Xaa2-NH2 (3); Tyr-A1-B2-C3-NH2 (214);

C D-Ile-D-Met-D-Trp-Gly-Xaa2-NH2 (222); where Xaa = any natural amino of any naturally occurring amino acid; Al = D-norvaline or D-norleucine;

C D-Ile-D-Met-D-Trp-Gly-Xaa3 = Trp or naphthylalanine; x and y = 0-2; but not over 2 in total; Xaa3 = Phe, DPhe or benzylamino; D4 = Lys or Arg;

C D-Ile-D-Methylene. These new compounds are useful: (i) for in peptide or details of the details of th
                                                                                                                                                                                                                                                                                                                                                                                                                   (Ξ)
                                                                                                                                                                                                                                                                                                                                                                                                which are opioids which -Trp-Tyr-Xaa-NH2 (1) Lys-His-Xaa-NH2 (3);
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          assay and study of opiate receptor subtypes, particularly mu receptors in the brain; (ii) for in vivo localisation of receptor subtypes; and (iii) therapeutically to block the peripheral effects (e.g. constipation pruritus) of centrally acting pain killers such as morphine. They are very selective for the mu opioid receptor, over binding to the delta and kappa receptor subtypes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                             New opioid peptides which bind mu receptors specifically agonist or antagonist activity and are used for study and localisation of mu receptors and to treat peripheral side
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                  form"
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                  amide
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Pred. No. 9.3e+05;
1; Mismatches 1;
                  is in
                                                                                                                                                                               INST MOLECULAR STUDIES
                  "the C-terminal
                                                                                                                                                                                                                                                                                                                                                                 Column 8; 92pp; English
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 Modified-site
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                                                  US5641861-A.
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                                                                                                                                                                                                                                                                                                                                                                Disclosure;
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                                                                                 24-JUN-1997
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The patent discloses eight new groups of opioid peptides which bind to the mu-receptor to act as agonists or antagonists. The peptides can be used for in-vitro assays to study opiate receptor subtypes (especially the mu type) in brain or other tissue samples; and for in-vivo diagnosis to localise opioid subtypes. The peptides are also useful as drugs to treat pathologies associated with other compounds which interact with the opioid receptor system. Therefore they can be used in medicaments for treating pathologies associated with the mu receptor and as analgesics. They can be used therapeutically to block the peripheral effects of centrally acting pain killers, e.g. to prevent side effects such as constipation and pruritis associated with morphine. The present sequence represents a specific example of one of the new groups of peptides, of formula

Ac-Arg-Trp-Ile-Gly-Trp-Xaa-NH2 where Xaa = a naturally occurring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Opioid peptide; ligand binding; opioid receptor;
micro-selective opioid peptide; enkephalin; opioid receptor system;
blocking; peripheral effect; centrally acting pain killer; morphine
                                         form"
                                                                                                                                                                                                                                                                                                                                                                                                                          useful for
for blocking
morphine
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                                         C-terminal
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                                                                                                                                                                                                                                                                                                                                                                                                                       New mu opioid receptor binding ligand peptide(s) - in-vitro and in-vivo diagnosis, as analgesics, and peripheral effects of centrally acting drugs, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
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Pred. No. 9.3e+05;
l; Mismatches 1
                                                                                                                                                                                                                                                                                  (TORR-) TORREY PINES INST MOLECULAR STUDIES
                                         is in
"N-acetyl-Arg"
                                         "this residue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 19; 57pp; English
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60.0%;
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'note=
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nes 3; Conser
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WIGWH
                    Misc-difference
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                                                                                                                                                                                    06-JUN-1996;
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                                                                                                                                                                                                                                        N atoms in the peptide backbone between respective amino acids is modified by permethylation, perallylation, perethylation, perbenzylation and pernaphthylation. The peptides inhibit ligand binding to an opioid receptor. Specifically, the peptides inhibit the micro-selective opioid peptide enkephalin. The peptides can be used in vivo diagnostically to localize opioid receptor subtypes. They can be used to treat pathologies associated with other compounds which interact with the opioid receptor system. The peptides are especially useful for blocking the peripheral effects of centrally acting pain killers such as morphine. AAY23005-Y23024 represent opioid peptides of the invention, and are derived from the general sequence given in AAY23004.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                         ng the peripheral effects of
morphine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               y, transcription factor; E2F; E2F-1; cell cycle; DP-1;
transcription; apoptosis; proliferative disorder;
restenosis.
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                                                                                                                                                                                                                                 each of
                                                                                                                                                                                                                                                                                                                                                                                                            Length 6;
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                                                                                                                                                                                                                                 in which
                                                                                                                                                                                                                                                                                                                                                                                                          DB 20;
9.3e+05;
                                                                                                                                                                                                                                 describes opioid peptides,
                                                                                                     PINES INST MOLECULAR STUDIES
                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                         for blocking
                                                                                                                                                                                                                                                                                                                                                                                                          Score 31;
Pred. No.
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                                                                                                                                                                                      aB
                                                                                                                                                                       l peptides useful for bloc
acting pain killers such
                                                                                                                                                                                                          Column 8; 92pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                          68.9%;
larity 60.0%;
Conservative
                                                                                95US-0488659
                                                          95US-0488659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB01507 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kontermann RE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
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                                                                                                                                                                       peptides
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                                                                                                                                                  WPI; 1999-394647/33
                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 3; Conserv
                                                                                                                                                                                                                               specification
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                                                                                                    (TORR-) TORREY
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                                                        07-JUN-1995;
                                                                              07-JUN-1995;
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             US5919897-A.
                                   06-JUL-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                     Local
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                                                                                                                           Dooley
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the
                                                                                                                                                                                                                                                                                                                                                                                                                                                   11ly cross-reactive; cancer; immunogenic cancer cell;
vaccine; tumour-specific immunogenic response inducer;
fibrosarcoma; myxosarcoma; liposarcoma; oligodendroglioma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   stress
             E2F
                                                                                                                                                                                                                               Gaps
                                                                      rector E2F and inhibit cell cycle progression may be useful as research agents to investigate the interaction between E2F and DP-1 or the activation of transcription by E2F-1/DP-1 heterodimers. They may also be used for inducing apoptosis and/or cell cycle arrest in a cell, particularly for treatment of cancer or other proliferative disorders such as psoriasis and restenosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                       stress protein-peptide complex;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to
             transcription factor
for the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Composition useful for treating and diagnosing cancer, comprises protein-peptide complexes associated with tumor, and isolated antigen-binding fragments of an antibody that binds specifically complex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumour
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      medulloblastoma; primitive neural ectodermal
                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                 conforming peptide (CCP)
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                                                                                                                                                                                                       DB 21;
9.3e+05;
             the DNA binding domain of cycle progression, useful
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No.
                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnosis;
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                                                                                                                                                                                                         Score
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                                                                                                                                                                                                     68.9%;
nilarity 83.3%;
Conservative
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MacDonald GC
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                                                                                                                                                                                                                                                                                                                                          Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                 H11 binding site consensus
                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                        Antigen-binding; tumour;
                                                          26; 42pp;
             Peptides binding to
and inhibiting cell
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                                                                                                                                                                                                                                                                                                                                          standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunogenically cytostatic; vac
                                                                                                                                                                                                                                                                               WVRAHF
                                                          Example; Page
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          astrocytoma;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ependymoma;
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Entwistle
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                                    cancer
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surface-associated SPPC of TC. (I) has cytostatic activity and can be used in vaccine production and as a tumour-specific immunogenic response inducer. (I) is useful for treating 71 types of cancers or tumours in a subject, such as astrocytoma, fibrosarcoma, myxosarcoma, liposarcoma, oligodendroglioma, ependymoma, medulloblastoma, and primitive neural ectodermal tumour (PNET). (I) is useful as cancer immunogen including vaccines. (I) is useful for diagnostic and palliative use, for detecting or imaging cancer cells, and to monitor the course of amelioration of malignancy in an individual. AAM43707 to AAM47109 represent peptides which are used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                     7 AA;
                                                                                                                                                                                                                                                                                                                                     Sequence
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Indels Length Score 31; DB 22; I Pred. No. 9.3e+05; ; Mismatches 1; .. H 68.9%; larity 66.7%; Conservative Similarity 4; Conserv 9 WVRWHF Н Query Match Best Local Matches Б ઠે

9 1 WRRWNF

RESULT 16 AAR86140

standard; peptide; 10 AAR86140; AAR86140

Anti-ELAM-1 binding peptide #117.

(first

26-JUN-1996

selectin; Peptide mimetic; endothelial leukocyte adhesion molecule; ELAM; receptor; leukocyte; vascular wall; endothelium; extravasation; inflammation; sialyl Lewis; cell surface glycoprotein; HL60 cell

Synthetic.

WO9531210-A1

23-NOV-1995

95WO-US06315 11-MAY-1995; 94US-0241054. 11-MAY-1994;

(AFFY-) AFFYMAX TECHNOLOGIES NV

Lee Koller KJ, Dower WJ, RW, Cwirla SE, Dower CL, Ruhland-fritsch B; Barrett Martens

J

WPI; 1996-010687/01

New peptide(s) that bind to endothelial leukocyte adhesion molecule 1 - useful for treating inflammation and other E-selectin mediated diseases

Disclosure; Page 17; 85pp; English.

involved to E-selectin, nity for the alkyl ON (R6) (SLe-x) tics This . The peptide are up to 100 micromole that bind to endothelial leukocyte adhesion molecule (ELAM)-1. This that bind to endothelial leukocyte adhesion molecule (ELAM)-1. This molecule is a member of the selectin family of receptors and is inverse in binding of leukocytes to the vascular endothelial wall prior to extravasation of the leukocyte, e.g. to a site of inflammation.

The peptides bind pref. to E-selectin but may also bind L- or P-selectin, and can be used to treat conditions mediated by E-selectin e.g. inflammatory conditions. The peptides have strong affinity for selectin receptors and inhibit the binding of the sialyl Lewis (SLepart of cell surface glycoproteins to E-selectin. The peptide are small, generally less than 2 kD, have an IC50 of up to 100 micromole against binding of HL60 cells to ELAM-1, have one or more peptide in hinkages replaced by CH2OC(0)NR, phosphonate, CH2SO2NR, CH2NR, CON(H) or NHCONH linkages where R = H or a lower alkyl and R6 = a lower alkyl

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Gaps
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  ρ
                                           Length 10;
                                                             Indels
C-termini
The peptides may also have substituted N- and C-termin succinimido, N-benzyloxycarbonyl or N-lower alkyl cpds
                                                            ;
0
                                            DB 17;
                                                    56;
                                                            Mismatches
                                            Score 31;
Pred. No
                                                    Pred.
                                                             ;
0
                                                   100.08;
                                             68.9%
                                                              Conservative
                                                     Similarity
                           10 AA;
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                                                                                                 WVRW
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                            Sequence
                                            Query Match
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RESULT AAR8614

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Gaps

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AAR86145 standard; peptide; 10 AA.

AAR86145;

(first entry) 26-JUN-1996 Anti-ELAM-1 binding peptide #117.

selectin; Peptide mimetic; endothelial leukocyte adhesion molecule; ELAM; receptor; leukocyte; vascular wall; endothelium; extravasation; inflammation; sialyl Lewis; cell surface glycoprotein; HL60 cell

Synthetic

"contain amidated C-terminus" Location/Qualifiers /note= 10 Modified-site Key

WO9531210-A1

23-NOV-1995.

95WO-US06315 11-MAY-1995;

11-MAY-1994;

94US-0241054.

(AFFY-) AFFYMAX TECHNOLOGIES NV.

Lee Koller KJ, Barrett RW, Cwirla SE, Dower WJ, Martens CL, Ruhland-fritsch B;

WPI; 1996-010687/01.

New peptide(s) that bind to endothelial leukocyte adhesion molecule 1 - useful for treating inflammation and other E-selectin mediated diseases

Disclosure; Page 17; 85pp; English.

Peptides AAR86024-R86236 are examples of peptides and their mimetics that bind to endothelial leukocyte adhesion molecule (ELAM)-1. This molecule is a member of the selectin family of receptors and is involved in binding of leukocytes to the vascular endothelial wall prior to extravasation of the leukocyte, e.g. to a site of inflammation.

The peptides bind pref. to E-selectin but may also bind L- or p-selectin, and can be used to treat conditions mediated by E-selectin, e.g. inflammatory conditions. The peptides have strong affinity for the selectin receptors and inhibit the binding of the sialyl Lewis (SLe-x) part of cell surface glycoproteins to E-selectin. The peptide are small, generally less than 2 kD, have an IC50 of up to 100 micromole against binding of HL60 cells to ELAM-1, have one or more peptide are linkages replaced by CH2OC(O)NR, phosphonate, CH2SO2NR, CH2NR, CON(R6), or NHCONH linkages where R = H or a lower alkyl and R6 = a lower alkyl. The peptides may also have substituted N- and C-termini e.g. The peptides may also have substituted N- and C-termini e.g.

10 AA; Sequence

60-

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10

AAW63963 standard; peptide;

RESULT AAW6396

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                                                                                                                                                                                                                                                                         selectin;
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for the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ON (R6)
                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Peptides AAR86024-R86236 are examples of peptides and their mimetics that bind to endothelial leukocyte adhesion molecule (ELAM)-1. This molecule is a member of the selectin family of receptors and is invo in binding of leukocytes to the vascular endothelial wall prior to extravasation of the leukocyte, e.g. to a site of inflammation.

The peptides bind pref. to E-selectin but may also bind L- or P-selectin, and can be used to treat conditions mediated by E-select e.g. inflammatory conditions. The peptides have strong affinity for selectin receptors and inhibit the binding of the sialyl Lewis (SLepart of cell surface glycoproteins to E-selectin. The peptide are small, generally less than 2 kD, have an IC50 of up to 100 micromole against binding of HL60 cells to ELAM-1, have one or more peptide inkages replaced by CH2OC(0)NR, phosphonate, CH2SO2NR, CH2NR, CON(R) or NHCONH linkages where R = H or a lower alkyl and R6 = a lower alk succinimido, N-benzyloxycarbonyl or N-lower alkyl cpds.
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                                                                                                                                                                                                                                                                   Peptide mimetic; endothelial leukocyte adhesion molecule; ELAM; receptor; leukocyte; vascular wall; endothelium; extravasation; inflammation; sialyl Lewis; cell surface glycoprotein; HL60 cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        that bind to endothelial leukocyte adhesion molective treating inflammation and other E-selectin mediat
                               ö
   Length 10;
                               Indels
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17;
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 DB 3
Score 31; DB
Pred. No. 56;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 17; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dower WJ,
                                                                                                                                                       AAR86146 standard; peptide; 10 AA
                                                                                                                                                                                                                                           Anti-ELAM-1 binding peptide #123.
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100.0%; P
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68.9%; Sc. larity 100.0%; I Conservative 0;
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Ruhland-fritsch
                                                                                                                                                                                                                  entry)
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              Similarity 4; Conser
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1 - useful for
                                                        WVRW
                                                                                   6 WVRW
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                                                                                                                                                                                                                                                                                                                                                                                                                                             11-MAY-1994;
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Martens CL,
                                                                                                                                                                                                                 26-JUN-1996
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                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                   AAR86146;
Query Match
Best Local S
Matches 4
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site of E-selectin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps

    useful for,
    inflammatory

                                                                          1; ELAM-1; inflammation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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Pred. No. 56;
0; Mismatches
                                                                                                                                                                                                                                                                                                                  Koller KJ,
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1.8
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                                                                                                                                                                                                                                                                                                                                                                                                                 84pp; English.
                                                                                                                              Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide; 10 AA
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                                                                        al leukocyte adhesion diagnosis; mimetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
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                                                                                                                                                                                                                                        95US-0439817.
92US-0881395.
93US-0057295.
                                                    ELAM-1 peptide mimetic #118
                                                                                                                                                                                                                   95US-0439817
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                    (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                 Column 93-94;
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Ruhland B;
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e.g. treating c
condition(s)
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                                                                                                                                         Modified-site
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06-MAY-1992;
05-MAY-1993;
11-MAY-1994;
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                    25-MAR-2003
02-OCT-1998
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                                                                         Endothelial
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AAW63963
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AAW6396
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Gaps

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Length 10;

17;

DB 3

Score 31; DB Pred. No. 56; 0; Mismatches

Conservative

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Matches

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WVRW

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WVRW

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Similarity

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95US-0439817
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                                                                   Cwirla SE,
Ruhland B;
                                                                                                                                                                                                                                                                                                                                                                                                                                           /note=
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treating
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              12-MAY-1995;
06-MAY-1992;
05-MAY-1993;
11-MAY-1994;
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12-MAY-1995;
                                                                                                                      condition(8)
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                                                                                                                                                                                                                                                                                                                                                               Peptide for
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                                                                                                       Peptide(s)
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Best Local S
Matches 4
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Martens
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                                                     (AFFY-)
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AAR3739
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                                                                                                                                                                                                                                                                                      -selectin
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                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                        for,
                                                                                                                                                                                                        useful finflammat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       adhesion molecule 1; ELAM-1; inflammation;
                               inflammation;
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by E-selectin such as
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                              ELAM-1;
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                                                                                                                                                                   Koller KJ
                                                                                                                                                                                                                                                                                                                                  DB
56;
                                                                                                                                                                                                                                                                                                                                                  Mismatches
                               adhesion molecule
                                                                                                                                                                                                                                                                                                                                  31;
No.
                                                                                                                                                                                                                                     English.
                                                                                                                                                                                               reptide(s) or their mimetic(s) that e.g. treating conditions mediated by condition(s)
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Pred.
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100.0%;
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                                      mimetic
                                                                                                              95US-0439817.
92US-0881395.
93US-0057295.
94US-0241054.
                                                                                                                                                                                                                                                                                                                                                                                                                    standard; peptide;
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                 #119
                                                                                                 95US-0439817
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                peptide mimetic
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(first en
                              al leukocyte
diagnosis; m
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diagnosis; n
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Ruhland
(first
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06-MAY-1992;
05-MAY-1993;
11-MAY-1994;
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02-OCT-1998
                                                                   US5728802-A
                                                                                                                                                                   RW,
 02-OCT-1998
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                               Endothelial
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                                      selectin;
                                                     Synthetic
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Best Local
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                 ELAM-1
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Matches
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E-selectin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Toxic shock; blood endotoxin removal; serum; diagnostic reagent; cytokine release control; treatment; pertussis; bacterial meningitis; HIV related infections; polymyxin B; Group II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                      useful for, inflammatory
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56;
                                                                                                                                                              Koller KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                               Column 91-92; 84pp; English.
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100.0%; P)
                                                                                                                  AFFYMAX TECHNOLOGIES NV
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95US-0439817.
92US-0881395.
93US-0057295.
94US-0241054.
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37pp; English

10;

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mula

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glucagon; diabetes;
disulphide.
                                                                                                                The (Group II) peptide is an example of a generic peptide of formula R-{ Lys/Arg/His - Phe/Tyr/Trp - Leu/Ile/Val }n-R, where n = 1-100 and each R is H, an amino acid residue or a fatty acid residue.

The peptide is useful for treating or preventing septic shock, mixing with polymyxin B to reduce its toxicity; removing endotoxins fron blood, sera or other fluids (in vivo or in vitro); controlling release of cytokines induced by endotoxins; as diagnostic reagents to detect and quantify toxins in blood or sera; preparing non-toxic antigenic complexes of lipid A or lipopolysaccharide (LPS); and for treating pertussis, bacterial meningitis and HIV-related infections. The usual dose is 10-100 ug/kg/day, given parenterally. It binds to the same sites as polymyxin B, i.e. it inhibits all the toxic effects of lipid A. It has no antibiotic activity; does not lyse erythrocytes; has no toxicity in mice when injected at 50mg/kg and is relatively unstable
                                                                                                                                                                                                                                                                                                            is relatively unstable
                                            comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            growth
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                                                                                                                                                                                                                                                                                                                                                                             Length 6;
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                                          shock
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                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                          ore 30; DB 14; ed. No. 9.3e+05; Mismatches 0
                                                        analogs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           useful
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Peptide useful as somatostatin antagonist
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                somatostatin antagonist; growth hormone; growth promoter; gastric enzyme; eating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "D-form residues"
                                       specified sequences of aminoacid(s) and comprising sequences retro-orientated
                                                                                                                                                                                                                                                                                                                                                                            Score 30;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           somatostatin antagonist peptide(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW66066 standard; peptide; 6 AA.
                                                                                             Example, Page 5; 39pp, English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0812724.
                                                                                                                                                                                                                                                                                                                                                                            66.7%;
                                                                                                                                                                                                                                                                                                                                                                                       Larity 75.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AMCY ) AMERICAN CYANAMID
                WPI; 1993-094304/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1998-458800/40
                                                                                                                                                                                                                                                                                                                                                                                    Similarity 3; Conserv
                                                                                                                                                                                                                                                                                                                     proteases.
                                                                                                                                                                                                                                                                                                                                                   6 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                             WVRW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Baumbach WR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EP863156-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW66066;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                Н
                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                      against
                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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Gaps

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                          The invention relates to somatostatin antagonists that can be used to promote the growth of meat-producing animals by decreasing the effect of somatostatin and/or increasing the release of growth hormone, insulin, glucagon and/or gastric enzymes and/or enhancing immune function. Pure somatostatin antagonists may also be useful for treating human or animal disorders where reversal of somatostatin activity is beneficial, e.g. gastrointestinal or eating disorders, diabetes or brain dysfunction. The present sequence represents a somatostatin antagonist.
                          can be used to
sing the effect o
ormone, insulin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes linear and cyclic peptides, which decrease the effect of somatostatin. The somatostatin antagonist peptides are used for decreasing the effect of somatostatin, by contacting a somatostatin receptor site. They are also used for increasing the release of jucagon, enhancing the growth of animals and enhancing immune function. They can be used to treat gastrointestinal and eating disorders, diabetes and brain dysfunction, and also to increase growth in meat producing animals. The peptides demonstrate inverse agonist activity. This allows them to act as pure somatostatin antagonists, while blocking intrinsic somatostatin receptor activity, independent of endogenous somatostatin.

AAY24253 to AAY24304 represent peptides used in the exemplification of
                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gastric;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Somatostatin antagonist; growth hormone; insulin; glucagon; gastric enzyme; immune function; cyclic peptide; gastrointestinal disorder; eating disorder; diabetes; brain dysfunction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gastrointestinal and eating disorders,
                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                   antagonist peptide from US5925618 Example
                                                                                                                                                                                            Length
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                                                                                                                                                                                             Mismatches
                                                                                                                                                                                            DB 19
                                                                                                                                                                                            30;
No.
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                                                                                                                                                                                            Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptides, used to treat gas
betes, and brain dysfunction
                                                                                                                                                                                                                         1;
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98US-0033395.
                                                                                                                                                                                          66.7%;
larity 75.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                           standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0033395
                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
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                                                                                                                                                                                                       Similarity 3; Conserv
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WIRW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Somatostatin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-JUL-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                      15-SEP-1999
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03-MAR-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diabetes,
                                                                                                                                                               Sequence
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Best Local
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Sequence

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09-JUL-1999

AAY08189

AAY08189 standard; peptide;

AAY08189

RESULT

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the
                                                                                                                                                                                                                                                   CHIPS; Chemotaxis Inhibitory Protein; CSa-receptor; C5aR; formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cellinflammation; cardiovascular disease; central nervous system disease; gastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammatory; cardiant; cerebroprotective; neuroprotective; nootropic; dermatological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    in from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       joint
                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 e g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to peptides (ABR44811-ABR47162 and ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein from Staphylococcus aureus. The peptide fragments are useful in prophylaxis or treatment of diseases or disorders involving the C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or neutrophils, monocytes and endothelial cells or involving acute chronic inflammation reactions. The diseases or disorders includicardiovascular diseases, disease of the central nervous system, gastrointestinal diseases, skin diseases, genitourinary diseases diseases, respiratory diseases and HIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Combination of peptides derived from chemotaxis inhibiting prote Staphylococcus aureus (CHIPS) having CHIPS activity, useful in prophylaxis and treatment of inflammation, cardiovascular, skin kidney diseases
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                            Indels
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   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ore 30; DB 24;
ed. No. 9.3e+05;
Mismatches 1;
                           ·;
                                                                                                                                                                                                                          CHIPS-related peptide #782
ore 30; DB 20;
ed. No. 9.3e+05;
Mismatches 0
                                                                                                                                                                                                                                                                                                                                  anti-HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 30;
Pred. No. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gosselaar-de Haas CJC,
 Score 30;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 13; 89pp; English.
                                                                                                                                                                                                                                                                                                                                   immunosuppressive;
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ilarity 50.0%;
Conservative
66.7%;
illarity 75.0%;
Conservative
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                                                                                                                                               standard; Peptide;
                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                              Staphylococcus aureus. Synthetic.
                                                                                                                                                                                                                             aureus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-247783/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PHARM
              Similarity 3; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                      WO2003006048-A1.
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JAG;
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                                                                              S
                                                                                                                                                                                                                             Staphylococcus
                                                                                                                                                                                                                                                                                                                                  gynecological;
                                                                              WIRW
                                                       WVRW
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                                                                                                                                                                                                 10-JUN-2003
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                                                                                                                                                                        ABR45592;
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Best Local
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   Query Match
Best Local
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Matches
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                                                                                                                                                                                                                                                                                                                                          with affinity
                                                                                                                                                                                                                                                                                                                                                for coagulation factor VIII which can be used for for labeling, identification (diagnostic) and purification of factor VIII. Some are specific for one of natural and recombinant factor VIII, others are reactive with both forms. Factor VIII is used to treat disorders of blood coagulation. Using relatively small peptides, rather than large antibody molecules generally used, simplifies purification of factor VIII. The peptides are of formula R1-X-R2 where R1 = amino or a peptide; R2 = carboxy or a peptide and X = a peptide of at least 3, preferably 7-12, amino acid residues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                        actor VIII; clotting factor VIII; diagnosis; treatment; disorder; blood coagulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide eluted after biopanning against maltose binding protein.
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0
                                                                                                                                                                                                                                                                                                                                           (AAY08119-Y08212)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Intervening protein sequence; IVPS; protein splicing; protein production; maltose binding protein.
                                                                                                                                                                                                                                                                                      factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ore 30; DB 20;
ed. No. 9.3e+05;
Mismatches 1
                                                                                                                                                                                                                                                                                      clotting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 30;
Pred. No. 5
                                                                                                                                                                                                                                                                                                                                         peptides
binding peptide
                                                                                                                                                                                                                                                                                        for blood
                                                                                                                                                                                                                                                                                                                   38; 51pp; German.
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ښ
                                                                                                                                                                                                                                                                                                                                            novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66.7%;
illarity 33.3%;
Conservative
                                                                                                                                                                            97DE-1040310.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide;
                                                                                                                                                 98WO-EP05822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
                                                                                                                                                                                                                                                                                                                                            invention describes
                                                                                                                                                                                                                                                                                       affinity
                                                                                                                                                                                                        OCTAPHARMA AG
 VIII
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Best Local Similarity
2, Conserv
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                                                                                                                                                                                                                                                            WPI; 1999-312410/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
                          Coagulation factor
purification; diso
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 AA;
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   factor
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                                                                                                                                                                                                                                                                                                                   4; Page
                                                                                                                                                                                                                                                                                         Peptides with
                                                                                                                                                12-SEP-1998;
                                                                                                                                                                                                                                    Ä
                                                                                                                                                                              13-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US5834247-A.
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                                                                                                                        25-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                  Synthetic.
                                                                                                                                                                                                                                   Jungbauer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
   Clotting
                                                                                                                                                                                                        (OCTA-)
                                                                                                                                                                                                                                                                                                                  Claim
                                                                                                                                                                                                                                                                                                                                           This
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                                                                                                                                                                                                                                                                                                                        AAW80372-93 represent peptides eluted after biopanning against maltose binding protein, in the course of the invention. The specification describes IVPS (intervening protein sequence) regions which encode peptides which are removed via protein splicing to form the native protein. The specification describes a modified protein comprising a target protein or portion, fused either internally or terminally, to a IVPS, or to an amino- or carboxyl-terminal element of a IVPS. The IVPS are capable of excision from or cleavage of the modified protein upon predetermined conditions, in cis or trans, e.g. temparature increase, deglycosylation unblocking of amino acid residues, treatment with chemical reagents. The methods can be used for modifying, producing, purifying, labelling or isolating target proteins such as enzymes, toxins, cytokines,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nerapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fusogenic; nuclear localisation signal; NLS; encapsulation; lipogene; liposome; micelle; karyophilic; cytostatic; antitumour; solid tumour; peptide-lipid-polynucleotide complex; neoplastic disease; gene therap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                        New modified target proteins - which have controllable intervenir protein sequence which can facilitate production, purification, labelling or isolation of target proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97;
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                                                                                                                                                                     Xu M;
                                                                                                                                                                        Hodges
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                carcinoma.
                                                                                                                                                                                   Southworth M,
                                                                                                                                                                                                                                                                                                 Example 22; Fig 36; 123pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO:147.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard; Peptide; 14 AA
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                                                                                                                                          (NEWE ) NEW ENGLAND BIOLABS INC
                                                    97US-0811492.
92US-0004139.
93US-0146885.
95US-0496247.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                carcinoma; prostate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Saccharomyces cerevisiae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                    Chong SSC, (
Perler FB,
                                                                                                                                                                                                               WPI; 1999-008713/01.
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Best Local Similarity
4; Conserve
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12 AA;
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                                                   05-MAR-1997;
09-DEC-1992;
03-NOV-1993;
28-JUN-1995;
29-DEC-1995;
                         05-MAR-1997;
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10-NOV-1998
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Ω,
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ABB74383
                                                                                                                                                                       Adam
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The present invention describes a method for producing micelles with entrapped therapeutic agents. The method comprises: (1) combining negatively charged agent with a cationic lipid in a ratio where 30-90 % of the negatively charged atoms are neutralised by positive charges on lipid molecules to form an electrostatic micelle complex in 20-80 % ethanol; of combining the micelle complex of a with fusogenic-karyophilic peptide conjugates in a 0.0-0.3 ratio, therefore producing micelles with entrapped therapeutic agents. Also described is a method for delivering a therapeutic agent in vivo, comprising the administration of the micelle. ABB74256 to ABB74858 represent specifically claimed nuclear localisation signal (NLS) peptides for use in the method as the fusogenic-karyophilic peptides. The micelles produced can have cytostatic and antitumour activities. The peptide-lipid-polynucleotide complexes produced are useful for inhibiting the progression of neoplastic diseases. The invention relates to the field of gene therapy and is diseases. The invention relates to the field of gene therapy and is directed toward methods for producing peptide-lipid-polynucleotide complexes suitable for delivery of polynucleotides. The encapsulated molecules display therapeutic efficacy in eradicating solid tumours including but not limited to breast carcinoma or prostate carcinoma.

ABB74235 to ABB74255 are used in the exemplification of the present
                                                                                                                              agents with into targeted
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                                                                                                                             ation of plasmid DNA (Lipogenes) and therapeutic localization signal/fusogenic peptide conjugates
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            domain; cell signalling;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 23; Le 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 30;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide SEQ ID 40 which binds to the
                                                                                                                                                                                           107pp; English.
                                                                                                                                                                                                             present invention describes a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in; zinc finger; SH3 control.
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09-JUN-2000; 2000US-210925P
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                                                                                              WPI; 2002-164295/21
                                                                                                                                                                                             Claim 14; Page 63;
                                                                                                                                                              liposome complexes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                BOULIKAS
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                                                                                                                           Encapsulation
nuclear locali
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cell cycle cor
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                                                               Boulikas T;
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Best Local
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Wang Y;

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O'Brien

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Set of specific low density lipoprotein receptor gene mutations for diagnosis of familial lipid metabolism errors including hyperlipemia
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      2001-123102/13
                                                                                                                                           Similarity 3; Conserv
                                                                                                                            7 AA;
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                                                                                                                                                                                                                                                                                                                      (BMLB-) BML INC
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                Novel SH3 do
replication,
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Best Local
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                          tissue,
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      WPI;
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Location/Qualifiers
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ilarity 60.0%;
Conservative
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errors in patients using
Lipoprotein (LDL) recepto
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Matches
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                                                                                                                                                                                                protein
and as a
                                                                                                                        This invention relates to an SH3 domain-containing protein termed TADGS, and its variants. The invention includes amino acid and polynucleotide sequences for TADGS, and oligonucleotides which bind to either the basic amino acid region and/or the zinc finger motif of the TADGS protein. The regulating the expression of the TADGS gene in a cell. The TADGS protein is useful as a source of amino acids, as a nutrition supplement, and as marker for human tissue, or in cell cycle control. TADGS protein or peptides generated from the protein sequence are useful as antigens for the production of polyclonal and monoclonal antibodies. DNA encoding TADGS is useful as an antisense vehicle for cell cycle control by shutting down signalling or cell division. The present sequence represents a peptide identified from a phage display peptide library through biopanning with the TADGS protein.
                                                                                                                                                        basic
                                                                                                                                                                      The
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ker for huma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            receptor; mutation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hominidae LDL receptor related peptide sequence #139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hominidae, low density lipoprotein receptor; LDL receptection; lipid metabolic error; hyperlipaemia; mutarteriosclerosis; ischaemic heart disease; ischaemia
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                                            in useful
and as a
                                                                                                                                                                                                                                                                                                                                                              Score 29; DB 22; I
Pred. No. 9.3e+05;
i; Mismatches 1;
                                               protein
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                                             domain-containing TADG5 protes
on, as a nutrition supplement,
t in cell cycle control -
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                                                                                                  36; 85pp; English
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                                                                                                                                                                                                                                                                                                                                                              64.4%;
ilarity 60.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard; Peptide;
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abolism

The present invention describes a method for detecting lipid met

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ow density used in the
                                                                                                                  of
                                                 diseases
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lipoprotein (LDL) receptor gene mutations. The method can be used in diagnosis of an inherited predisposition to the development of diseas associated with hyperlipaemia, such as arteriosclerosis and ischaemic heart disease. ABL91141 encodes the LDL receptor given in ABB90525. ABL91142 to ABL91183 represent PCR primers used in the amplification the receptor gene. ABL90990 to ABL91140 and ABB90445 to ABB90524 represents sequences used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                       .;
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analogs
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                                                                                                                                                                                                                                                                         Score 29; DB 23;
Pred. No. 9.3e+05;
Mismatches
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of aminoacid(s) and
retro-orientated
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R - ( Lys/Arg/His - Phe/Tyr/Trp - Leu/Ile/Val )n-R, where n = 1-100

and each R is H, an amino acid residue or a fatty acid residue.

The peptide is useful for treating or preventing septic shock,

mixing with polymyxin B to reduce its toxicity; removing

endotoxins fron blood, sera or other fluids (in vivo or in

vitro); controlling release of cytokines induced by endotoxins;

as diagnostic reagents to detect and quantify toxins in blood

or sera; preparing non-toxic antigenic complexes of lipid A or

lipopolysaccharide (LPS); and for treating pertussis, bacterial

c neningitis and HIV-related infections. The usual dose is 10-100

c ug/kg/day, given parenterally. It binds to the same sites as

c ug/kg/day, lie. it inhibits all the toxic effects of lipid A. It
                                                                                                                                                                                                                                                                                                                                                                                                             itis;
                                                          able
                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                           Toxic shock; blood endotoxin removal; serum; diagnostic reagent; cytokine release control; treatment; pertussis; bacterial mening: HIV related infections; polymyxin B; Group II.
               ug/kg/day, given parenterally. It binds to the same sites as polymyxin B, i.e. it inhibits all the toxic effects of lipid A. has no antibiotic activity; does not lyse erythrocytes; has no toxicity in mice when injected at 50mg/kg and is relatively unst
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              - compris
   The usual dose is 10-100
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                                                                                                                                                        Indels
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                                                                                                             Score 28; DB 14; Le
Pred. No. 9.3e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New peptide for treatment or prevention
specified sequences of aminoacid(s) and
comprising sequences retro-orientated
 meningitis and HIV-related infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "repeat region"
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                                                                                                                       Similarity 75.0%; 3; Conservative
                                                                                                                                                                                                                                                                             AAR37388 standard; peptide;
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                                                                     against proteases.
                                                                                                  6 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
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                                                                             Gaps
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             unstable
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peptide"
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analgesics
  erythrocytes; has and is relatively
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or
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Pred. No. 9.3e+05;
; Mismatches (
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Pred. No. 9.3e+05
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treating asthma
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t 50mg/kg
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has no antibiotic activity; does n
toxicity in mice when injected at
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with
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illarity 75.0%;
Conservative
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                                                                                                                                                                peptide;
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                                                                                                                                                                                                       entry)
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                                                                                                                                                               standard;
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          toxicity in mice w against proteases.
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                                                                                                                                                                                                                                             neurokinin
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RESULT AAR937

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The patent describes novel cyclic hexapeptide and octapeptide compounds which are antagonists of neurokinin A and which are useful medically as analgesics and for treating respiratory diseases such as asthma. The present sequence represents a specifically preferred example of the new peptides.
                                        tachykinin; respiratory disease; asthma;
                                                                                                               not an N-terminal amino acid, but conwith Gly(6) to form a cyclic peptide"
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Pred. No. 9.3e+05
; Mismatches
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treating asthma
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Trp(1) to fo
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EW
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                     Cyclo[-Trp-trp-Leu-Arg-Trp-Gly-]
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antagonists useful e.g. fo
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                                       A antagonist; cyclic.
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(first
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 10-MAY-1996
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                                          neurokinin
                                                    analgesic;
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Matches 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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peptide"
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peptide"
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analgesics
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cyclic
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D-form
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                                                                                                                                                            respiratory
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Pred. No. 9.3e+05
1; Mismatches
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Trp(5) are
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cing asthma
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                                                                                                                                                          A antagonist; tachykinin; cyclic.
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Trp(2) and
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                                                                                                                                        Cyclo[-Tyr-Trp-Leu-Arg-Trp-Gly-]
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                                                                          standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69;
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e.g. fo
                                                                                                                    entry)
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/note=
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s useful
                                                                                                                   (first
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                                                                                                                    10-MAY-1996
                                                                                                                                                            neurokinin
                                                                                                                                                                     analgesic;
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tachykinin analgesics

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"not an N-terminal amino acid, but condensed
                           asthma;
              A antagonist; tachykinin; respiratory disease; cyclic.
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Peptides AAR86024-R86236 are examples of peptides and their mimetics that bind to endothelial leukocyte adhesion molecule (ELAM)-1. This molecule is a member of the selectin family of receptors and is involved
                                                                                                                                          prohormone of the
                                                                                                                                                       part 100 for the peptides are generated by internal processing of the prohormone at the Ser-Leu and Lys-Lys sequences. This peptide is designated SAP bombesin-10 ("BIM-26336") and corresponds to residues 49-58 of the prohormone. The SAP bombesin-10 is then modified from prohormone-cleaved peptide by having an amidated methionyl residue. This peptide can be generated by an internal cleavage of the SAP bombesin-14 (AAR74032). The amide gp. being donated from the Gly rest position 59 of the prohormone. The peptides have applications will human and veterinary medicine, especially to treat the diseases or disorders specified in US5217955, WO9402018 and WO9220363.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New peptide(s) that bind to endothelial leukocyte adhesion molecule 1 - useful for treating inflammation and other E-selectin mediated
                                                                        recombinant DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide mimetic; endothelial leukocyte adhesion molecule; ELAM; receptor; leukocyte; vascular wall; endothelium; extravasation; inflammation; sialyl Lewis; cell surface glycoprotein; HL60 cell
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Pred. No. 1.7e+02;
Mismatches
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                                                                         Purified bombesin-related peptide(s)
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                                                                                                                  Column 7-8; 10pp; English
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ilarity 66.7%;
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AAR74034. T
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Martens
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                                                                                                                                                                                                                                                                                                                                                                                                              The patent describes novel cyclic hexapeptide and octapeptide compounds which are antagonists of neurokinin A and which are useful medically as analgesics and for treating respiratory diseases such as asthma. The present sequence represents a specifically preferred example of the new
                                                                                                                                                                                                                                                                                                                                                                                                                                                           the new
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amplification; probe; prohormone; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                            not a C-terminal amino acid, but condens with Tyr(1) to form a cyclic peptide"
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with Ala(6) to form a cyclic peptide"
                                                                                                                                                                                                                                                                                                                                        tachykinin
analgesics
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                                                                                                                                                                                                                                                                                                                                                      or as
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 28; DB 16;
Pred. No. 9.3e+05;
l; Mismatches (
                                                                                                                                                                                                                                                                              Owen TJ;
                                                                                                    D-form residue"
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                                                                       "D-form residue"
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75.0%;
                             "not
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                                                                                                                                                                                                                                                                                                                                   New cyclic peptide derivs.
antagonists useful e.g. for
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                                                                                                                                                                                                                                                                                                                                                     e.g.
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              Modified-site
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11-AUG-1993
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Matches 4
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in binding of leukocytes to the vascular endothelial wall prior to extravasation of the leukocyte, e.g. to a site of inflammation. The peptides bind pref. to E-selectin but may also bind L- or P-selectin, and can be used to treat conditions mediated by E-selectin, e.g. inflammatory conditions. The peptides have strong affinity for the selectin receptors and inhibit the binding of the sialyl Lewis (SLe-x) part of cell surface glycoproteins to E-selectin. The peptide are small, generally less than 2 kD, have an IC50 of up to 100 micromole against binding of HL60 cells to ELAM-1, have one or more peptide linkages, replaced by CH2OC(0)NR, phosphonate, CH2SO2NR, CH2NR, CON(R6), or NHCONH linkages where R = H or a lower alkyl and R6 = a lower alkyl. The peptides may also have substituted N- and C-termini e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW63846-W64054 are peptides and peptide mimetics that bind selectins including endothelial leukocyte adhesion molecule 1 (ELAM-1) and can be used for blocking adhesion of leukocytes to the selectins. The peptides have applications for the treatment of conditions mediated by E-selectin, e.g. inflammatory conditions. They can also be used for diagnostic purposes, e.g. for identifying the vascular site of E-selectin vivo or can be coupled to anti-inflammatory or other drugs. (Updated on 25-MAR-2003 to correct PF field.)
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tory
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y E-selectin such as inflamma
                                                                                                                                                                                                                                                                                                                                                                                                                                        molecule 1; ELAM-1; inflammation;
                                                                                                                                                                                                                       ö
                                                                                                                                                                                                 Length 10;
                                                                                                                                                                                               Score 28; DB 17; 1 Pred. No. 1.7e+02; 1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Koller KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Column 91-92; 84pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mimetic(s) that be ions mediated by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dower WJ,
                                                                                                                                                                                                                                                                                                                                 AAW63962 standard; peptide; 10 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                        adhesion
                                                                                                                                                                                                                                                                                                                                                                                                                                        Endothelial leukocyte adhesio selectin; diagnosis; mimetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95US-0439817.
92US-0881395.
93US-0057295.
94US-0241054.
                                                                                                                                                                                              Similarity 75.0%; 3; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 ELAM-1 peptide mimetic #117
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                                                                                                                                                                                                                                                                                                                                                                                          entry)
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Ruhland B;
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treating
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06-MAY-1992;
05-MAY-1993;
11-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-MAY-1995;
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02-OCT-1998
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Best Local
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Matches
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                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence is that of a peptide isolated by panning with the D32.39 antibody, with an ELISA result of 0.1. This was done as an example of a method of constructing a random peptide library of at least 10(6) members. The method enables the generation, screening and selection of peptide ligands and receptor molecules. Peptides generated using the method can be used in therapeutics and diagnostics, e.g. to inhibit receptor activity. (Updated on 25-MAR-2003 to correct PN field.)
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                                                                                                                                                                                                                                                                                                                                                                       screening; peptide ligands; diagnostics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Random peptide library and screening method - using vectors encoding fusion proteins of DNA binding protein and peptide, in screening for ligands
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 28; DB 14; Length 12; Pred. No. 2e+02;
                                        Indels
   Length
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  DB 19;
L.7e+02;
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Score 28; DB Pred. No. 1.7e
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "D32.39 epitope"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                              Generation; screening; selection; receptor molecules; therapeutics;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure, Fig 3; 153pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΡJ,
                                                                                                                                                                                                                                                                                                                                         D32.39 antibody isolated peptide
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  62.2%;
75.0%;
                                                                                                                                                                                                           standard; peptide;
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(first entry)
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                                        Conservative
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              Similarity
3; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        A random peptide library was constructed in E.coli hosts.

The library was lysed and panned using antibody D32.39 which recognises the Dynorphin B epitope RQFKVV. Peptides isolated by panning were sequenced and a consensus epitope was identified (see features table). Arginine is invariant in the first position for all the ELISA positive clones (AAR56701-R56758). No strong bias was evident for the second position but in the third position, 5 amino acids (Phe, His, Asp, Tyr, Trp) account for 98% of the residues. The fourth position shows a strong bias for positively charged residues (Lys and Arg) with almost exclusively hydrophobic residues at position 5 (mostly Val). Val and Thr predominate at the sixth position (76%) with Ser and Ile accounting for the remaining amino
                                                                                                             Dynorphin B; epitope; antibody panning; random peptide library; antibody D32.39; ligand screening.
                                                                                                                                                                                                                                                                                                                                                                                       Construction of random peptide library - by creating vectors contg. DNA encoding the random peptide(s) fused to DNA binding proteins; used to screen for novel ligands
                                                                                       Random peptide #53 isolated by anti-dynorphin B Ab panning.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 28; DB 15;
Pred. No. 2e+02;
0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF field.)
                                                                                                                                                                                    3..8
/label= D32.39_epitope
                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            to correct
           AAR56756 standard; peptide; 12 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                   English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62.2%; 50.
100.0%; Pi
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92US-0963321
                                                      (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                     45pp;
                                                                                                                                                                                                                                                                                                                                             Stemmer WPC;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     3B;
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                                                                                                                                                                                                                                                                                    16-OCT-1991;
15-OCT-1992;
                                                                                                                                                                                                                                                             15-OCT-1992;
                                                      25-MAR-2003
20-MAR-1995
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                                                                                                                                                                                                                                                                                                                                            PJ,
                                                                                                                                              Synthetic
                                AAR56756;
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AAR56756
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the RP
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                                            antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A random peptide (RP) library can be constructed by transforming host cells with a collection of recombinant vectors that encode a fusion protein comprised of a DNA binding protein (BP) and a RP and also contains a binding site for the DNA BP. The RP library can be used to screen for novel ligands, the method resulting in the formation of a complex comprising the fusion protein bound to a receptor through the ligand and to the recombinant DNA vector through the DNA BP. An RP library (AAR91450-506) was screened with D32.39 and a six amino acid region of dynorphin B (RQFKVV), an opioid peptide, was found to be the preferred recognition sequence for D32.39.

(Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     expressing DNA used to identify
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                                            construction; monoclonal
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red. No. 2e+02;
Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Random peptide libraries comprising host cells binding proteins fused with random peptide(s) -e.g. peptide ligands of receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stemmer WPC;
monoclonal antibody peptide ligand
                                                                                                                                                                                                epitope"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 28;
Pred. No.
                                          dynorphin B; random peptide library;
D32.39; epitope; screening.
                                                                                                                                         Location/Qualifiers
3..8
/note= "D32.39 emits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ЪЈ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TECHNOLOGIES NV.
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Best Local Similarity 100.0%;
Matches 4; Conservative
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91US-0778233.
94US-0290641.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW25286 standard; peptide;
                                                                                                                                                                                                                                                                                                                                  94US-0290641
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4; Fig 3B; 46pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Miller JF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-159686/16.
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                                                                                                                                                                                                                                                                                                                                                                           15-OCT-1992;
16-OCT-1991;
15-AUG-1994;
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                                                                                                          Synthetic
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AAR91504 standard; Peptide; 12 AA.

AAR91504

ID

RESULT

(updated)

25-MAR-2003

AAR91504

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Sequences were isolated by a method of the invention to isolate a DNA binding protein, or a peptide with specific affinity for a receptor. The method comprises providing a recombinant DNA vector encoding a peptide with specific affinity for a receptor. A library of oligonucleotides encoding different potential DNA binding proteins is inserted in-frame into the vector to create a fusion protein library. Host cells are transformed, and cultured to express the fusion protein. If a fusion protein comprises a potential DNA binding protein with affinity for the vector, the fusion protein binds to the vector to form a complex. The host cells are lysed to isolate the complexes which are contacted with a receptor to induce peptide binding to the receptor. The random peptide it binds to the wethod. The random peptides can be used for that bind receptor molecules of interest. The peptides can be used for the method of affinity enrichment allows a very large library of peptides to be screened, and by identifying the peptide de novo, the sequence or setructure of the receptor molecule or the natural binding partner of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
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                                                                                                                                                                                                                                                                                                                              Random peptide library and affinity enrichment methods for screening it - useful to identify peptide(s) that bind receptor mols. of interest, useful for therapeutic, diagnostic and related purposes
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Pred. No. 2e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                  Stemmer WPC;
                                              /note= "D32.39 recognition site"
                                                                                                                                                                                                                                                                Schatz PJ,
              Location/Qualifiers 3..8
                                                                                                                                                                                                                                                                                                                                                                                                  4; Fig 3b; 149pp; English
                                                                                                                                                                                                                              AFFYMAX TECHNOLOGIES NV
                                                                                                                                                                                                                                                               Miller JF,
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larity 100.0%;
Conservative (
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95US-0484090
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07-JUN-1995;
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                                                                                 WO9640987-A1
                                                                                                                 19-DEC-1996
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Matches
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ler; immunodeficiency;
CVID; AIDS;
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                     Gaps
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0
Length 12
                     Indels
                     2;
22;
           2e+02;
                                                                                                                                                                          SEQ ID 2212
 DB
              Mismatches
28;
No.
 Score
Pred.
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2000US-240816P.
2001US-276248P.
2001US-277379P.
62.2%;
ilarity 60.0%;
Conservative
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                                                                                                               standard; peptide;
                                                                                                                                                        entry)
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           Similarity 3; Conserv
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                                          WVRWH
                                                             WTPWH
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                                                                                                                                                                                                                                                                                                                                                       16-JUN-2000;
17-OCT-2000;
16-MAR-2001;
21-MAR-2001;
                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                   15-JUN-2001;
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  y Match
Local S
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                      Matches
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ABP46201
  Query
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cancer;

Internalising peptide; transport; apoptosis; arthritis; cance stem cell; cell differentiation; immune response stimulation;

HIV vaccine.

Synthetic

47

Internalising peptide SEQ ID NO:

(first entry)

05-NOV-2001

AAB60032;

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12

standard; Peptide;

AAB60032

4,4

RESULT AAB600

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2 VRWH

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into e in

cells,

nuclear or facilitating

Peptides that facilitate uptake and cytoplasmic and/or nu transport of proteins, DNA and viruses, useful, e.g. for uptake of antigens in immunogenic compositions -

Claim 1; Page 123; 129pp; English

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Gambotto

Glorioso JC,

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Frizzell

7

Robbins PD,

WPI; 2001-273309/28

PITTSBURGH

VIND

(UYPI-)

99US-0151980 2000US-0188944

01-SEP-1999; 13-MAR-2000;

2000WO-US24034

31-AUG-2000;

08-MAR-2001

WO200115511-A2

The present invention provides the sequences of 75 peptides which facilitate the uptake and transport of viruses, proteins and nucleic acids. These internalising peptides can be used for transport into the cytoplasm or the nucleus. They are useful for facilitating uptake into the cell, inducing apoptosis, for example in the treatment of arthritis and cancer, to expand a population of stem cells or differentiated cells to stimulate cell differentiation, facilitate the integration of AAV integenome of a cell, and to stimulate an immune response, for example the case of a HIV vaccine. The present sequence is one of the peptides of

12 AA;

Sequence

genome of case of a

invention.

the

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25-MAY-2001; 2001US-293499P.
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(HUMA-) HUMAN GENOME SCI INC. (CAMB-) CAMBRIDGE ANTIBODY TECHNOLOGY

H Vaughan Choi GH, sc, Barash Ruben SM,

WPI; 2002-114799/15.

nsefnj Antibodies against B Lymphocyte Stimulating polypeptides, u the diagnosis and treatment of cancers and immune disorders

3148pp; English 2952; 2; Page Claim

This invention describes novel antibodies that immunospecifically bine bymphocyte Stimulator (BLyS) polypeptides. BLyS is a member of the tumour necrosis factor (TNF) super family and induces B cell proliferation and differentiation. The antibodies of the invention his cytostatic, immunosuppressive, immunostimulant, immunomodulatory, antirheumatic and antiAIDS activity and can be used in vaccines to inhibit the expression and activity of BLyS. The antibodies bind to and so may be used to detect and quantitate the presence of BLyS in biological samples and may be used in this way to diagnose disease associated with aberrant expression of BLyS. They may also be administered to treat diseases associated with aberrant BLyS express and activity such as cancer, immune, and autoimmune disorders and diseases, e.g. systemic lupus erythematosus, rheumatoid arthritis, immunodeficiency (cvID) and acquired immunodeficiency syndrome (AIDS)). ABP43990-ABP47228 repression the antibodies and fragments of the antibodies described in the meth the invention.

13 AA; Sequence

ö Length 13; Indels Score 28; DB 23; I Pred. No. 2.2e+02; I; Mismatches 2; 62.2%; ilarity 50.0%; Conservative Query Match Best Local Similarity Matches 3; Conser

9 WVRWHF Š

11 6 WPNWYF

В

completed: December 12, 2003, 10:29:02 ne : 31.3 secs Search co

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GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd
                  Copyright
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sw model using - protein search, OM protein 2003, 11:44:55 'n December Run on:

conde

s/sec update 5 , Search time 7,33333 Sec (without alignments) 38.476 Million cell update

US-09-912-414-2 45

WVRWHF score: Sequence: Title: Perfect

Gapext 0.5 BLOSUM62 Gapop 10.0 Scoring table:

47026705 residues 127863 seqs, Searched:

795 Total number of hits satisfying chosen parameters

seq length: 0 seq length: 15 Minimum DB Maximum DB Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt 41:* Database

a rinted, Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being prand is derived by analysis of the total score distribution.

SUMMARIES

	Description	P08946 phyllomedu	08951 rar	08945 litoria		38639 m	1327	83047	41122 p	41989	2097 1	8209	710	8691 thunnus	158	198	885	3455	3465	8805	8842 conus	81107 pinus	2	42560 mytilus	23260 rana ridi	P82088 litoria cit	82092 litoria c	0	01520 conus geo	අ	P42716 parapolybia	1654 vespa basa	1515 ves	P29260 prunus sero
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No. [1] To the secretion;

E SEQUENCE.

C TISSUE=Skin secretion;

EXEQUENCE.

C TISSUE=Skin secretion;

EXA Barra D., Erspamer G.F., Simmaco M., Bossa F., Melchiorri P.,

RT Barra D., Erspamer G.F., Simmaco M., Bossa F., Melchiorri P.,

RT Rohdei-litorin: a new peptide from the skin of Phyllomedusa rohdei.";

RT Rohdei-litorin: a new peptide from the skin of Phyllomedusa rohdei.";

RT FEBS Lett. 182:53-56(1985).

CC -!- SUBCELLULAR. LOCATION: Secreted.

CC -!- SUBCELLULAR. Skin.

CC -!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN

CC -!- SIMILARITY: Dombesin.

CC -!- SIMILARITY: Dombesin.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana
NCBI_TaxID=8404;
                                                                          15-SEP-2003 (Rel. 42, Last annotation update)
Rhodei-litorin.
Phyllomedusa rohdei (Rohde's leaf frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi, Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
Phyllomedusinae; Phyllomedusa.
NCBI TaxID=8394;
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InterPro; IPR000874; Bombesin.
Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bombesin family; Amidation;
Pyrrolidone carboxylic acid.
MOD_RES 1 1 PYRROLIDONE CARBOXYLIC ACI
MOD_RES 9 AA; 1090 MW; 4ECCCIE861ADC377 CRC64.
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Pred. No. 1.3e+05;
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                                                (Rel. 28, Last sequence up
(Rel. 42, Last annotation
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                     STANDARD;
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ID RANC RANPI
AC P08951;
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DT 01-NOV-1988 (
DT 15-SEP-2003 (
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P08946;
01-NOV-1988
01-FEB-1994
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Length

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DB 1;
1.3e+05;
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01-OCT-1994 (Rel. 30, Last sequence update)
01-FEB-1995 (Rel. 31, Last annotation update)
Unknown protein from 2D-page of fibroblasts (Mus musculus (Mouse).
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  Score 20; DB Pred. No. 1.3 0; Mismatches
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InterPro; IPR000874; Bombesion.
Pfam; PF02044; Bombesion; 1.
PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bom
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Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10090;
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ilarity 50.0%;
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1372 MW;
Similarity 50.0%; 3; Conservative
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P38639;
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MEDLINE=78003546; PubMed=908397;
Anastasi A., Montecucchi P.C., Angelucci F., Erspamer V., Endean R.;
"Glu(OMe)3-litorin, the second bombesin-like peptide occurring in methanol extracts of the skin of the Australian frog Litoria aurea.",
Experientia 33:1289-1289(1977).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
-!- TISSUE SPECIFICITY: Skin.
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InterPro; IPR000874; Bombesin.
Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bombesin family; Amidation; Methylation; Pyrrolidone carboxylic acid.
MOD RES 1 1 PYRROLIDONE CARBOXYLIC ACID.
MOD RES 2 2 METHYLATION (PARTIAL).
                                                                                            Unpublished results, cited by:
Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
Comp. Biochem. Physiol. 77C:99-108(1984).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
-!- TISSUE SPECIFICITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
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TISSUE=Skin secretion;

MEDLINE=75187011; PubMed=1140241;

Anastasi A., Erspamer V., Endean R.;

"Aminoacid composition and sequence of litorin, a bombesin-like nonapeptide from the skin of the Australian leptodactylid frog Litoria aurea.";
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Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bombesin family; Amidation.
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TISSUE=Skin secretion;
MEDLINE=84131098; PubMed=6141890;
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(Rel. 28, Last seq
(Rel. 42, Last ann
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01-FEB-1994
15-SEP-2003
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                                                                                Nakajima T.;
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P42991;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 42, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Bombesin-like peptide L (PG-L).
Pseudophryne guentheri (Guenther's toadlet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachinae; Pseudophryne.
NCBI_TaxID=30349;
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MEDLINE=90287814; PubMed=2356157;
Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
Roberts J.D., Melchiorri P., Erspamer V.;
"Six novel tachykinin- and bombesin-related peptides from
the Australian frog Pseudophryne guntheri.";
Peptides 11:299-304(1990).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
-!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANAT
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TISSUE=Fibroblast;
MEDLINE=95009907; PubMed=7523108;
Merrick B.A., Patterson R.M., Wichter L.L., He C., Sel)
Merrick B.A., Patterson R.M., Wichter and novel murine
"Separation and sequencing of familiar and novels".
"Separation and sequencing of familiar and novels."
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Sciurognathi; Muridae;
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TISSUE=Latex;

Kosasi S., van der Sluis W.G., Boelens R., T'Hart L.A., Labadie R.P.;

Kosasi S., van der Sluis W.G., Boelens R., T'Hart L.A., Labadie R.P.;

Kosasi S., van der Sluis W.G., Boelens R., T'Hart L.A., Labadie R.P.;

"Labaditin, a novel cyclic decapeptide from the latex of Jatropha "Lebaditin, a novel cyclic decapeptide from the latex of Jatropha "The "Labaditin I NRR.";

"The multifida L. (Euphorbiaceae). Isolation and sequence determination of two-dimensional NMR.";

"The second of two-dimensio
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core eudicots; Rosidae;
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Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
Neogastropoda; Conoidea; Conidae; Conus.
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eu
eurosids I; Malpighiales; Euphorbiaceae; Jatropha.
NCBI_TaxID=3996;
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(Rel. 40, Last sequence update)
(Rel. 41, Last annotation update)
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(Rel. 13, Last sequence update)
(Rel. 41, Last annotation update)
                                                                                     ore 19.5; Ded. No. 1.3e
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MEDLINE=21547785; PubMed=11688995;
Massilia G.R., Schinina M.E., Ascenzi P.,
"Contryphan-Vn: a novel peptide from the snail Conus ventricosus.";
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Pred.
              -!- MISCELLANEOUS: ON THE 2D-GEL
Electrophoresis 15:735-745(1994)
                         PROTEIN IS: 6.6, ITS MW IS:
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16-OCT-2001
28-FEB-2003
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01-JAN-1990
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commercial
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Enterobacteriaceae; Photorhabdus.
NCBI TaxID=29488;
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01-NOV-1995 (Rel. 32, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Melanotropin gamma (Gamma-melanocyte stimulating hormone) (Gamma Theromyzon tessulatum (Leech).
Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;
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01-FEB-1995 (Rel. 31, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Hypothetical protein in pnp 3'region (ORF3) (Fragment)
Photorhabdus luminescens (Xenorhabdus luminescens)
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1.3e+05;
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                 SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: Expressed by the venom d
MASS SPECTROMETRY: MW=1088.6; METHOD=MALDI.
SIMILARITY: BELONGS TO THE CONTRYPHAN FAMILY
 288:908-913 (2001)
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Pred. No. 1.1e+03
; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64774A4F6267A364
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                                                                                                                                                                                                                                          Mismatches
                                                                                                                             D-TRYPTOPHAN AMIDATION.
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                                                                                                                                                                                                      Score 18;
Pred. No.
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2; Conservative
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                                                                                       Toxin; Amidation; I
DISULFID 3
MOD RES 5
MOD RES 9
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ilarity 66.7%;
Conservative
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2; Conservative
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         Pelodryadinae; Litoria
NCBI_TaxID=104895;
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Eur. J. Biochem.
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16-OCT-2001
15-SEP-2003
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                                                                  SEQUENCE.
TISSUE=Brain;
TISSUE=Brain;
MEDLINE=94298944; PubMed=8026574;
MEDLINE=94298944; PubMed=8026574;
Salzet M., Wattez C., Bulet P., Malecha J.;
Salzet M., Wattez C., Bulet P., Malecha J.;
Isolation and structural characterization of a novel peptide related to gamma-melanocyte stimulating hormone from the brain of the leech Theromyzon tessulatum.";
Theromyzon tessulatum.";
FEBS Lett. 348:102-106(1994).
-!- SIMILARITY: BELONGS TO THE POMC FAMILY.
-!- SIMILARITY: S45698.
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P82098;
28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Electrin 2.2.
Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
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Australian buzzing tree fr
skin peptides from Litoria
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a; Bufonoidea; Hylidae;
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2DB8FACE6409C1E8 CRC64;
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1.5e+03;
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Rhynchobdellida; Glossiphoniidae; Theromyzon.
NCBI_TaxID=13286;
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Pred. No. 1.5e
1; Mismatches
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Eukaryota; Metazoa; Chordata; Craniata; Ve
Amphibia; Batrachia; Anura; Neobatrachia;
Pelodryadinae; Litoria.
                                                                                                                                                                                                                                                                                                                          Score 17;
Pred. No.
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Aust. J. Chem. 52:639-645(1999).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
Amphibian defense peptide; Amidation.
13 AMIDATION.
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TISSUE=Skin secretion;
Wabnitz P.A., Bowie J.H., Tyler M.J.,
"Peptides from the skin glands of the
Litori electrica. Comparison with the
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1486 MW;
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nes 3; Conser
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                                        tree frog
Litoria
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibla; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana
NCBI_TaxID=8407;
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TISSUE=Skin secretion;
MEDLINE=97175050; PubMed=9022710;
Simmaco M., Mignogna G., Canofeni S., Miele R., Mangoni M.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Neothunnus macropterus)
                  Wallace J.C.;
Australian buzzing
skin peptides from
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                                                                                                                                                                                        AMIDATION.
C1808EF33B357322 CRC64;
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-1- FUNCTION: HAS ANTIBACTERIAL ACTIVITY AGAINST (GRAM-POSITIVE BACTERIA.

-1- SUBCELLULAR LOCATION: Secreted.

-1- TISSUE SPECIFICITY: Skin.

-1- SIMILARITY: Belongs to the brevinin family.

Amphibian defense peptide; Antibiotic; Amidation.

MOD_RES 13 AMIDATION.
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ed. No. 1.5e+03;
Mismatches 0;
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Pred. No. 1.5e+03
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(Rel. 40, Last sequence update)
(Rel. 42, Last annotation update)
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TISSUE-Skin secretion;
Wabnitz P.A., Bowie J.H., Tyler M.J.,
"Peptides from the skin glands of the
Litori electrica. Comparison with the
                                                                                                  Aust. J. Chem. 52:639-645(1999).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
Amphibian defense peptide; Amidation.
MOD RES 13 AA; 1598 MW; C1808EF3
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Job time: 9.33333
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01-NOV-1995 (Rel. 32, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Melanotropin alpha (Alpha-MSH).
Anolis carolinensis (Green anole) (American chameleon).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi
Lepidosauria; Squamata; Iguania; Iguanidae; Polychrotinae; Anolis
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TISSUE=Pituitary;
MEDLINE=92270473; PubMed=1667689;
Dores R.M., Lancha A., Rand-Weaver M., Jankelow L., Adamczyk D.L
"Detection of a novel sequence change in the major form of alpha
"Detection of a novel sequence change in the reptile, Anolis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleoste: Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Scombroscombridae; Thunnus.
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Pred. No. 2.3e+03;
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PIR; A31570; A31570.
SEQUENCE 8 AA; 953 MW; 6AA863733051F1B7 CRC6
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TISSUE=Muscle;
MEDLINE=88326322; PubMed=3415688;
Kohama Y., Matsumoto S., Oka H., Teramoto T.
"Isolation of angiotensin-converting enzyme muscle.";
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MOLECULES).
AMIDATION.
FF991CA958BB09C1
                                                                          MEDLINE=75146434; PubMed=1125179;
Li C.H., Danho W.O., Chung D., Rao A.J.;
"Isolation, characterization, and amino acid
melanotropins from camel pituitary glands.";
Biochemistry 14:947-952(1975).
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J. Am. Chem. Soc. 82:4568-4572(1960).

PIR; A01464; MTCMAD.

PIR; A91785; MTHOAD.

InterPro; IPR001941; Mcortin ACTH.

Pfam; PF00976; ACTH domain; 1.

Hormone; Acetylation; Amidation.

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SPECIES=Horse; TISSUE=Pit
Dixon J.S., Li C.H.;
"The isolation and struct
from horse pituitaries."
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Q9R5M1;

O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)

O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)

O1-JUN-2002 (TrEMBLrel. 21, Last annotation update)

66 kDa cell surface adhesin for heparan sulfate (Fragment).

Staphylococcus aureus.

Bacteria; Firmicutes; Bacillales; Staphylococcus.

NCBI_TaxID=1280;

(1)

SEQUENCE.

MEDLINE=92176005; PubMed=1541563;

Liang O.D., Ascencio F., Fransson L.A., Wadstrom T.;

"Binding of heparan sulfate to Staphylococcus aureus.";

Infect. Immun. 60:899-906(1992).

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01-NOV-1998 (TrEMBLrel. 19, Last annotation update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
MHC class II B locus 4 (Fragment).
Pseudotropheus sp. 'Pseudotropheus tropheops complex'.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostei;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
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Pred. No. 8.3e+05;
ssDNA viruses; Microviridae; Microvirus
                                             Buckley K.J., Hayashi M.;
"Role of premature translational termination in expression of the phiX174 lysis gene.";
J. Mol. Biol. 198:599-607(1987).
EMBL; X07809; CAA30668.1; -.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
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Bacteria; Proteobacteria; Alphaproteobacteria; Rhodobacterales;
Rhodobacteraceae; Rhodobacter.
NCBI_TaxID=1061;
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MEDLINE=96001284; PubMed=7559877;
Hashimoto K., Koga M., Motomura T., Kasayama S., Kouhara H., Obnishi T., Arita N., Hayakawa T., Sato B., Kishimoto T.;
"Identification of alternatively spliced messenger ribonucleic encoding truncated growth hormone-releasing hormone receptor ir pituitary adenomas.";
J. Clin. Endocrinol. Metab. 80:2933-2939(1995).
EMBL; S79912; AAD14318.1; -.
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MEDLINE=92234963; PubMed=1569029;
Richter P., Brand M., Drews G.;
"Characterization of LHI- and LHI+ Rhodobacter capsulatus pufA
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NCBI_TaxID=169851;
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Bacteriol. 174:3030-3041(1992)
1L; S97552; AAC60406.1; -.
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EMBL; AF407521; AAL10116.1;
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"Mitochondrial DNA evidence
Cladistics 17:0-0(2001).
EMBL; AF407540; AAL10172.1;
Mitochondrion.
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eudicots; Rosidae;
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MEDLINE=93054573; PubMed=1385404;

Janssens S.P., Simouchi A., Quertermous T., Bloch D.B., Bloch K.D.;

"Cloning and expression of a cDNA encoding human endothelium-derived relating factor/nitric oxide synthase.";

J. Biol. Chem. 267:22694-22694(1992).
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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ENDOTHELIUM-derived RELATING factor, nitric oxide synthase
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01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
LHCPII (14AA) (Fragment).
Pisum sativum (Garden pea).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tra
Spermatophyta; Magnoliophyta; eudicotyledons; core eudic
eurosids I; Fabales; Fabaceae; Papilionoideae; Vicieae;
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EMBL; X06822; CAA29970.1; -.
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Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Va
NCBI_TaxID=169843;
                                                                                                                                   "Mitochondrial DNA evidence and evolution in Varanoidea (Squamat
Cladistics 17:0-0(2001).
EMBL; AF407507; AAL10075.1; -.
Mitochondrion.
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Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Anomura;
Lomidae; Lomis.
NCBI_TaxID=177234;
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01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Cytochrome oxidase subunit 1 (Fragment).
                                                                                                                                                                           EFD729DB436411A6 CRC64;
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Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Var
NCBI_TaxID=62052;
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01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Cytochrome c oxidase subunit I (Fragment).
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
Cytochrome c oxidase subunit I (Fragment).
Terranatos dolichopterus.
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"The evolution of diapause in the killifish family (Atherinomorpha, Cyprinodontiformes): A molecular piogeographic perspective.";
Evolution 53:1200-1216(1999).
EMBL; AF092421; AAF03041.1; -.
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Pred, No. 8.3e+05;
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Ast J.C.;
"Mitochondrial DNA evidence a
Cladistics 17:0-0(2001).
EMBL; AF407533; AAL10151.1; -
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ilarity 66.7%;
Conservative
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ilarity 66.7%;
Conservative
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OS Asterina pectinifera (Starfish).
OG Mitochondrion.
OC Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Asterozoa;
OC Sateroidea; Valvatacea; Valvatida; Asterinidae; Asterina.
OX NCBI_TaxID=7594;
RN [1]
RN [1]
RN SEQUENCE FROM N.A.
RX MEDLINE=89354669; PubMed=2766382;
RA Jacobs H.T., Asakawa S., Araki T., Miura K., Smith M.J., Watanabe K.;
RL Curr. Genet. 15:193-206(1989).
Curr. Genet. 15:193-206(1989).
Curr. Genet. 15:193-206(1989).
Curr. Genet. 15:193-206(1989).
FL Curr. Genet. 15:193-206(1989).
Curr. Genet. 15:193-206(1989).
Curr. Genet. 15:193-206(1989).
SEQÜENCE 8 AA; 1114 MW; FOC9D36415B736D6 CRC64;
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Search completed: December 3, 2003, 11:53:24 Job time : 27.3333 secs

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Score 16; DB 8; Length 8; Pred. No. 8.3e+05; 0; Mismatches 1; Indels

Query Match Best Local Similarity 66.7%; Matches 2; Conservative

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GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd
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using sw model - protein search, OM protein

2003, 11:44:55 <u>س</u> December Run on:

% 'Search time 7.33333 Seconds
(without alignments)
38.476 Million cell updates/sec

US-09-912-414-9 31

1 WXXWXF Title: Perfect score: Sequence: BLOSUM62 Gapop 10.0 , Scoring table:

0.5 Gapext

47026705 residues 127863 seqs, Searched:

795 hits satisfying chosen parameters: ų. Total number

Minimum DB seq length: 0 Maximum DB seq length: 15

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt_41:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and ir derived by analysis of the total score distribution.

SUMMARIES

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7 1 WWA1 ACHFU 7 1 WWA2 ACHFU 7 1 WWA3 ACHFU 8 1 ACI THUAL 8 1 AKH LIBAU 8 1 AKH LIBAU 8 1 AKH TABAT	ALIGNMENTS	; PRT; 10 reated) ast sequence updat	nut). Streptophyta; a; eudicotyle Suphorbiaceae;	W.G., Boelens R. lic decapeptide fr seae). Isolation a	IS AN ACTIVE PEPT COMPLEMENT ACTIVE AN INTERACTION WIC PEPTING. IC PEPTING. IIS PLANT IS USED BY WOUNDS, SKINS IN MW; D98AAD6362D1	67.7%; Score 21; DB 50.0%; Pred. No. 1.70 ive 0; Mismatches		reated) ast sequence updat ast annotation upd terranean cone). lusca; Gastropoda; tropoda; Sorbeocon ; Conidae; Conus. D MASS SPECTROMETR d=11688995; M.E., Ascenzi P.,
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ъ в в в в в в в в в в в в в в в в в в в		SULT 1 BA_JATMU LABA_J P13270 01-JAN 01-JAN	Labadit Jatroph Eukaryc Spermat eurosic NCBI_Ta	SECT TISS Kosa "Lab mult by m	- FUN CLA SEE - PIM - DIS TRE	Query Match Best Local Matches	c da	RESULT 2 COW CONVE ID COW CONVE AC P83047; DT 16-OCT-2001 DT 28-FEB-2003 DE CONTRYPHAN-OS CONUS VENTY OC APOGASTROPO OC NEOGASTROPO OC NEOGAS

Euteleostomi;

(GnRH-I)

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Gonadoliberin I (Gonadotropin-releasing hormone I) (Luliberin I).
Alligator mississippiensis (American alligator).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Archosauria; Crocodylidae; Alligatorinae; Alligator
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00446; GnRH; 1.
PS00473; GNRH; 1.
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01-NOV-1988 (Rel. 28, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Rhodei litorin.
Phyllomedusa rohdei (Rohde's leaf frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
Phyllomedusinae; Phyllomedusa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Rohdei-litorin: a new peptide from the skin of Phyllomedusa rol
FEBS Lett. 182:53-56(1985).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
-!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
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MEDLINE=85127560; PubMed=3838283;
Barra D., Erspamer G.F., Simmaco M., Bossa F., Melchiorri
Erspamer V.;
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PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bombesin family; Amidation;
Pyrrolidone carboxylic acid.
MOD_RES 1 1 1 PYRROLIDONE CARBOXYLIC ACT
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         of
"Contryphan-Vn: a novel peptide from the venom osnail Conus ventricosus.";
Biochem. Biophys. Res. Commun. 288:908-913(2001)
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Expressed by the venom du
-!- MASS SPECTROMETRY: MW=1088.6; METHOD=MALDI.
-!- SIMILARITY: BELONGS TO THE CONTRYPHAN FAMILY.
Toxin; Amidation; D-amino acid.
                                                                                                                                                                                                                      Score 19; DB 1; Le Pred. No. 1.3e+05; ; Mismatches 2;
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2; Conservative
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larity 50.0%;
Conservative
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IPR000874;
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SPECIES=C.pallasii; TISSUE=Brain, and Pituitary;
MEDLINE=20114351; PubMed=10650929;
Carolsfeld J., Powell J.F.F., Park M., Fischer W.H., Craig A.G.,
Chang J.P., Rivier J.E., Sherwood N.M.;
"Primary structure and function of three gonadotropin-releasing hormones, including a novel form, from an ancient teleost, herring.";
Endocrinology 141:505-512(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
SEQUENCE.
TISSUE=Brain;
MEDLINE=91352338; PubMed=1882082;
Lovejoy D.A., Fischer W.H., Parker D.B., McRory J.E., Park M.,
Lance V., Swanson P., Rivier J.E., Sherwood N.M.;
"Primary structure of two forms of gonadotropin-releasing hormone from brains of the American alligator (Alligator mississippiensis).
Regul. Pept. 33:105-116(1991).
-!- FUNCTION: Stimulates the secretion of gonadotropins.
-!- SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oncorhynchus keta (Chum salmon), and
Clupea pallasii (Pacific herring).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
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SPECIES=O.keta;
MEDLINE=83195140; PubMed=6341999;
Sherwood N., Eiden L., Brownstein M., Spiess J., Rivier J., Va.
"Characterization of a teleost gonadotropin-releasing hormone.
"Characterization of Sci. U.S.A. 80:2794-2798(1983).
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follicle-stimulating
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1 1 PYRROLIDONE CARBOXYLIC ACID
10 10 AMIDATION.
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01-FEB-1991 (Rel. 17, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin III (Gonadotropin-releasing hormone III)
RH III) (Luliberin III).
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Pred. No. 2.4e+03
; Mismatches
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Similarity 2; Conserv
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          TISSUE=Liver;
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01-NOV-1988
01-FEB-1994
15-SEP-2003
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Ranidae, Ran
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom:
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoide
NCBI_TaxID=9913;
[1]
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                                   acid
PIR; AZ11114; AZ11121 GNRH.

Pfam; PF00446; GNRH; 1.

PROSITE; PS00473; GNRH; 1.

PROSITE; PS00473; GNRH; 1.

Hormone; Amidation; Hypothalamus; Pyrrolidone carboxylic ACID.

MOD_RES 1 1 AMIDATION.

MOD_RES 10 AMIDATION.

1 AMIDATION.
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Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bombesin family; Amidation.
MOD RES 11 11 AMIDATION.
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D6C9885A61ADC366 CRC64;
                                                                                                                                                                                                                   Rana pipiens (Northern leopard frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea;
NCBI_TaxID=8404;
                                                                                                                                                                                                                                                                                            Nakajima T.;
Unpublished results, cited by:
Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
Comp. Biochem. Physiol. 77C:99-108(1984).
-!- SUECELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
-!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                           4
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28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Mitochondrial 28S ribosomal protein S34 (S34mt)
MRPS34.
                                                                           Score 14; DB 1; 1
Pred. No. 2.4e+03;
1; Mismatches 1
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(Rel. 09, Last sequence update)
(Rel. 42, Last annotation update)
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                                                                                                                                                                                                                                                                  SEQUENCE.
TISSUE=Skin secretion;
MEDLINE=84131098; PubMed=6141890;
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                                                                           Similarity 33.3%, 1; Conservative
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Best Local Similarity 33.2
Matches 2; Conservative
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01-NOV-1988
15-SEP-2003
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P82929;
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MEDLINE=21276436; PubMed=11279123;
Koc E.C., Burkhart W., Blackburn K., Moseley A., Spremulli L.L.;
Koc E.C., Burkhart W., Blackburn K., Moseley A., Spremulli L.L.;
"The small subunit of the mammalian mitochondrial ribosome:
identification of the full complement of ribosomal proteins present.";
J. Biol. Chem. 276:19363-19374(2001).
-!- SUBUNIT: Component of the mitochondrial ribosome small subunit
(28S) which comprises a 12S rRNA and about 30 distinct proteins.
-!- SUBCELLULAR LOCATION: Mitochondrial.
                                                                                                                                                                                                                                                                                                                                                   Gaps
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TISSUE=Skin secretion;

MEDLINE=78003546; PubMed=908397;

Anastasi A., Montecucchi P.C., Angelucci F., Erspamer V., Endean R.

"Glu(OMe)3-litorin, the second bombesin-like peptide occurring in methanol extracts of the skin of the Australian frog Litoria aurea.

Experientia 33:1289-1289(1977).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PIR; S07204; S07204.
InterPro; IPR000874; Bombesin.
Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bombesin family; Amidation; Methylation; Pyrrolidone carboxylic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Litoria aurea (Green and golden bell frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
Pelodryadinae; Litoria.
NCBI_TaxID=8371;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=75187011; PubMed=1140241;
Anastasi A., Erspamer V., Endean R.;
"Aminoacid composition and sequence of litorin, a bombesin-like
nonapeptide from the skin of the Australian leptodactylid frog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          skin.
TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
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D7CCC1E862CDC366 CRC64;
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Pred. No. 1.3e+05;
); Mismatches 4;
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Pred. No. 1.3e+05,
); Mismatches
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28, Last sequence update)
42, Last annotation update)
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METHYLATION
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Ribosomal protein; Mitochondrion.
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Experientia 31:510-511(1975)
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2; Conservative
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                                                                                                                                                                                                                                                           935 MW;
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TISSUE=Skin secretion;
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12 AA;
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12 AA;
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                                                        Hormone.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniform:
Catostomidae; Catostomus.

NCBI_TaxID=7971;
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                                                                                                                                    fact
                                                                                                                                                                                                                                                                                                         flies (Diptera).";
Proc. Natl. Acad. Sci. U.S.A. 86:8161-8164(1989).

-!- FUNCTION: HYPERTREHALOSAEMIC FACTORS ARE NEUROPEPTIDES THAT
ELEVATE THE LEVEL OF TREHALOSE IN THE HEMOLYMPH (TREHALOSE
THE MAJOR CARBOHYDRATE IN THE HEMOLYMPH OF INSECTS).

-!- SIMILARITY: BELONGS TO THE AKH / HRTH / RPCH FAMILY.

PIR; B33995; B33995.

InterPro; IPR002047; AKH.

PROSITE; PS00256; AKH; 1.

Neuropeptide; Amidation; Pyrrolidone carboxylic acid.
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pora cardiaca of
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                                                                                                                                                        Tabanus atratus (Horse fly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Tabanomorpha;
                                                                                                                                     cardiaca
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TISSUE=Corpora cardiaca;

MEDLINE=90046758; PubMed=2813385;

Jaffe H., Raina A.K., Riley C.T., Fraser B.A., Nachman Vogel V.W., Zhang Y.-S., Hayes D.K.;

"Primary structure of two neuropeptide hormones with ad hypotrehalosemic activity isolated from the corpora car flies (Diptera).";

Flies (Diptera).";

Proc. Natl. Acad. Sci. U.S.A. 86:8161-8164(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                            Pyrrolidone carboxylic acid
PYRROLIDONE CARBOXYLIC
AMIDATION.
                                                                                                 01-JAN-1990 (Rel. 13, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Hypertrehalosaemic factor (HOTH) (Dipteran corpora
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 13; DB 1; Le
Pred. No. 3.5e+03;
; Mismatches 1;
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13-AUG-1987 (Rel. 05, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation updat
Urotensin IIA (U-IIA) (UIIA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FUNCTION: UROTENSIN IS FOUND IN SYSTEM. IT HAS A SUGGESTED ROLE CORTICOTROPIN-RELEASING FACTOR.
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-1- FUNCTION: UROTENSIN IS FOUND IN SYSTEM. IT HAS A SUGGESTED ROLE
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urophyses.";
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P04558;
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Ostariophysi; Cypriniformes;
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13-AUG-1987 (Rel. 05, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Urotensin IIB (U-IIB) (UIIB).
Catostomus commersoni (White sucker).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniform
Catostomidae; Catostomus.
NCBI_TaxID=7971;
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IN OSMOREGULATION AND
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Peptides 4:367-373(1983).
-!- FUNCTION: UROTENSIN IS FOUND IN THE TELEOST C.
SYSTEM. IT HAS A SUGGESTED ROLE IN OSMOREGULA.
CORTICOTROPIN-RELEASING FACTOR.
-!- SIMILARITY: BELONGS TO THE UROTENSIN 2 FAMILY
      FAMILY
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Pred. No. 4e+03;
; Mismatches
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      TO THE UROTENSIN
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Eukaryota; Metazoa; Chordata; Craniata;
Actinopterygii; Neopterygii; Teleostei;
Cyprinidae; Cyprinus.
NCBI_TaxID=7962;
                                                                                                                                                                     Score 13;
Pred. No. 4
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(Rel. 05, Last sequence up
(Rel. 40, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE.
MEDLINE=84041959; PubMed=6138758;
McMaster D., Lederis K.;
"Isolation and amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                        PRT;
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InterPro; IPR001483; Urotensin II.
Pfam; PF02083; Urotensin II; 1.
PROSITE; PS00984; UROTENSIN II; 1.
-!- SIMILARITY: BELONGS TO THE UR(PIR; JS0423; JS0423.
InterPro; IPR001483; Urotensin_II
Pfam; PF02083; Urotensin_II; 1
PROSITE; PS00984; UROTENSIN_II; 1
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ilarity 33.3%;
Conservative
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1437 MW;
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1336 MW;
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Polyodon spathula (North American paddlefish).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleost
Actinopterygii; Chondrostei; Acipenseriformes; Polyodontidae,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORTICOTROPIN-RELEASING FACTOR. PROBABLY INVOLVED IN MUSCLE STIMULATION.
                                                                                                                                                                                                                                              Comp. Endocrinol. 99:323-332(1995).
FUNCTION: HAS A SUGGESTED ROLE IN OSMOREGULATION AND CORTICOTROPIN-RELEASING FACTOR. PROBABLY INVOLVED IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE.
TISSUE=Spinal cord;
MEDLINE=92319231; PubMed=1620290;
Conlon J.M., O'Harte F., Smith D.D., Balment R.J.
"Purification and characterization of urotensin I from an elasmobranch fish, Scyliorhinus canicula Neuroendocrinology 55:230-235(1992).
-!- FUNCTION: HAS A SUGGESTED ROLE IN OSMOREGULAT
                                                                                                                                              SEQUENCE FROM N.A.
TISSUE=Spinal cord;
MEDLINE=96051494; PubMed=8536944;
Waugh D., Youson J., Mims S.D., Sower S., Conlon Waugh D., Youson J., Mims A.D., Sower S., Conlon "Urotensin II from the river lamprey (Lampetra fl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
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on update)
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Pred. No. 4e+03;
; Mismatches
                           update)
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                                                                                                                                                                                                                                                                                                     SIMILARITY: BELONGS TO THE UROTENSIN PPro; IPR001483; Urotensin_II.

PF02083; Urotensin_II; 1.

ITE; PS00984; UROTENSIN_II; 1.
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No.
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(Rel. 29, Last sequence up (Rel. 40, Last annotation (U-II) (UII).
             (Rel. 35, Created)
(Rel. 35, Last sequence up (Rel. 40, Last annotation (U-II) (UII).
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Pred.
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UROTENSIN II;
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1526 MW;
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33.3%;
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Similarity 33.3%,
1; Conservative
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                                                                                                                                                                                                                     lamprey (Petromyzon
spathula).";
Gen. Comp. Endocrino
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TE: PS00984;
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12 AA;
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                                                                                                                         NCBI_TaxID=7913;
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P35490;
01-JUN-1994
01-JUN-1994
16-OCT-2001
             01-NOV-1997
01-NOV-1997
16-OCT-2001
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InterPro;
Pfam; PF02
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Pfam; PF02
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DISULFID
SEQUENCE
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Matches
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       Munekata E., Ohtaki T., Ichikawa T., McMaster D., Lederis K.;

(In) Rich D.H., Gross E. (eds.);

Proceedings of the 7th american peptide symposium, pp.69-72,

Pierce Chemical Co., Rockford Il. (1981).

Pierce Chemical Co., Rockford Il. (1981).

-!- FUNCTION: UROTENSIN IS FOUND IN THE TELEOST CAUDAL NEUROSECRETORY

SYSTEM. IT HAS A SUGGESTED ROLE IN OSMOREGULATION AND AS A

CORTICOTROPIN-RELEASING FACTOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=81054904; PubMed=6107911;
Pearson D., Shively J.E., Clark B.R., Geschwind I.I., Barkley M., Nishioka R., Bern H.A.;
Nishioka R., Bern H.A.;
"Urotensin II: a somatostatin-like peptide in the caudal neurosecretory system of fishes.";
Proc. Natl. Acad. Sci. U.S.A. 77:5021-5024(1980).
-!- FUNCTION: UROTENSIN IS FOUND IN THE TELEOST CAUDAL NEUROSECRETORY SYSTEM. IT HAS A SUGGESTED ROLE IN OSMOREGULATION AND AS A CORTICOTROPIN-RELEASING FACTOR.
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73960A9FB879CEBB CRC64;
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                                                                                                         -!- SIMILARITY: BELONGS TO THE UROTENSIN 2 FAMILY InterPro; IPR001483; Urotensin II. Pfam; PF02083; Urotensin II; 1. PROSITE; PS00984; UROTENSIN II; 1.
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4e+03;
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01, Last sequence update)
40, Last annotation update)
I) (UII).
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21-JUL-1986 (Rel. 01, I
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catshark).

(Spotted catshark)
Vertebrata; Chondra
Carcharhiniformes

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AS A SMOOTH

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n J.M.; fluviatilis)

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Search completed: December 3, 2003, 11:51:51 Job time : 7.33333 secs

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GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd
                Copyright
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model SΚ using protein search, OM protein

2003, 11:48:35 e, December Run on:

; ; Search time 11 Seconds (without alignments) 52.456 Million cell updates/sec

US-09-912-414-9 31 1 WXXWXF 6

score: Title: Perfect so Sequence: Scoring table:

Gapext 0.5 BLOSUM62 Gapop 10.0 , 283308 segs, 96168682 residues Searched:

of hits satisfying chosen parameters: Total number

seq length: 0 seq length: 15 Minimum DB Maximum DB

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

PIR 76:*
1: pirl:*
2: pir2:*
3: pir3:* 4 0 E 4

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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7		4		~	903	-cell receptor
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ഗ		4.		7	179	-cell-specific
9		4		N	132	g heavy cha
7		4.		7	337	-cell re
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Indels

Score 20; DB 2; Length 10; Pred. No. 5.7e+02; 0; Mismatches 2; Indels

Query Match Best Local Similarity 50.0%; Matches 2; Conservative

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T14215 T14223 T14219 A29169 PT0077 PA0099 S56004 S24159	S07241 RHPGG RHSHG RHAQ1 A21114 S68649 PH1365 S07205
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66 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	ж ж ч ч ч ч ч 8 в о ч ч к ч ч

ALIGNMENTS

1	cell surface adhesin for heparan sulfate, 66K - Staphylococcus aureus (fragment) C;Species: Staphylococcus aureus C;Date: 10-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 24-Feb-1995	Cincression: Assencio, F.; Fransson, L.A.; Wadstrom, T. Thiang, O.D.; Ascencio, F.; Fransson, L.A.; Wadstrom, T.	heparan	A;Accession: A43848 A;Status: preliminary A;Molecule type: protein A;Residues: 1-9 <lia></lia>	A; Note: sequence extracted from NCBI backbone (NCBIP:85442)	Query Match Best Local Similarity 50.0%; Pred. No. 2.8e+05; Matches 2; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	Oy 1 WXXW 4	Db 2 WTGW 5	RESULT 2	T-cell receptor gamma chain V-D-J region - human (fragment) C;Species: Homo sapiens (man)	C;Date: 19-Dec-1993 #sequence_revision 17-Mar-2000 #text_change 17-Mar-2000	R; Morità, C.T.; Verma, S.; Aparicio, P.; Martinez, C.; Spits, H.; Brenner, M.B.	A; Title: Functionally distinct subsets of human gamma/delta T cells.	A;Reference number: A49033; MUID:92083926; PMID:1684157 A;Accession: F49033	A;Status: preliminary A;Molecule type: DNA	A;Residues: 1-10 <mor> A;Cross-references: GB:S72605; NID:g240700; PIDN:AAB20632.1; PID:g240701</mor>	ote: sequence extracted from NCBI backbone (NCBIN:72605, Newpords: T-cell receptor	Trop t contains

precursor lymi

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GB:M14065; GB:M14066;
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C; Species: Oryctolagus cuniculus (domestic rabbit)
C; Date: 16-Aug-1988 #sequence_revision 16-Aug-1988 #text_change 05-Nov-1999
C; Accession: B25448
R; Akimenko, M.A.; Mariame, B.; Rougeon, F.
Proc. Natl. Acad. Sci. U.S.A. 83, 5180-5183, 1986
A; Title: Evolution of the immunoglobulin kappa light chain locus in the rabla R; Reference number: A94110; MUID: 86259753; PMID: 3088570
                                                                                   07-May-1999
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C; Date: 22-Nov-1993 #sequence_revision 26-May-1995 #text_chang
C; Accession: S23372
R; Pluschke, G.; Ricken, G.; Taube, H.; Kroninger, S.; Melchers
Eur. J. Immunol. 21, 2749-2754, 1991
A; Title: Biased T cell receptor V(alpha) region repertoire in
A; Reference number: S23364; MUD: 92037820; PMID: 1657615
A; Accession: S23372
A; Status: preliminary; translation not shown
A; Molecule type: mRNA
A; Residues: 1-13 <PLU>A; Cross-references: EMBL: X58167
C; Keywords: T-cell receptor
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                                                                                                                            Shane,
                                           Ig heavy chain DJ region (clone C344-99) - human (fragment)
C; Species: Homo sapiens (man)
C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_cha
C; Accession: PH1322
R; Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane,
J. Exp. Med. 176, 1577-1581, 1992
A; Title: Predominance of fetal type DJH joining in young chi
A; Reference number: PH1302; MUID:93094761; PMID:1460419
A; Accession: PH1322
A; Molecule type: DNA
A; Residues: 1-14 < WAS>
C; Keywords: heterotetramer; immunoglobulin
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ed. No. 2.2e+03;
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A;Residues: 1-13 <AKI>
A;Cross-references: GB:M14067; GB:M14062; C
C;Keywords: heterotetramer; immunoglobulin
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S61798
T-cell-specific transcription factor 1 splice form G - human (fragment)
N;Alternate names: transcription factor TCF-1G
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 19-Mar-1997 #sequence_revision 18-Jul-1997 #text_change 24-Jul-1:
C;Date: 19-Mar-1997 #sequence_revision 18-Jul-1997 #text_change 24-Jul-1:
C;Accession: S61798; Sc1880
R;Mayer, K; Wolff, E.; Clevers, H.; Ballhausen, W.G.
Biochim. Biophys. Acta 1263, 169-172, 1995
A;Title: The human high mobility group (HMG)-box transcription factor TCI
A;Reference number: S61796; MuID:95367594; PMID:7640309
A;Accession: S61798
A;Molecule type: mRNA
A;Residues: 1-13 < MAY>
A;Cross-references: EMBL:Z47364
A;Note: DNA was also sequenced
C;Keywords: alternative splicing; DNA binding; transcription factor
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Ig heavy chain DJ region (clone C510-100) - human (fragment)
C; Species: Howo sapiens (man)
C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-Margin Secession: PH1324
C; Accession: PH1324
R; Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rove J. Exp. Med. 176, 1577-1581, 1992
A; Title: Predominance of fetal type DJH joining in young children with A; Reference number: PH1302; MUID:93094761; PMID:1460419
A; Reference number: DNA
A; Molecule type: DNA
A; Molecule type: DNA
A; Molecule type: DNA
C; Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-MaC; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-MaC; Accession: PH1308
R; Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rove J. Exp. Med. 176, 1577-1581, 1992
A; Title: Predominance of fetal type DJH joining in young children wit A; Reference number: PH1302; MUID: 93094761; PMID: 1460419
A; Reference rumber: PH1308
A; Reference type: DNA
A; Residues: 1-12 < WAS>
C; Keywords: heterotetramer; immunoglobulin
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Pred. No. 6.6e+02;
); Mismatches 2;
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Pred. No. 7e+02;
); Mismatches
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larity 50.0%;
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Best Local Similarity 50.0%;
Matches 2; Conservative
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Best Local Similarity
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RESULT 14
T17057
cytochrome-c oxidase (EC 1.9.3.1) chain I - Crotaphytus collaris mitochondrion (fragme)
C;Species: mitochondrion Crotaphytus collaris
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C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 11-May-2
C;Accession: T13976
R;Macey, J.R.; Larson, A.; Ananjeva, N.B.; Fang, Z.; Papenfuss, T.J.
Mol. Biol. Evol. 14, 91-104, 1997
A;Title: Two novel gene orders and the role of light-strand replication
A;Reference number: Z17789; MUID: 97153826; PMID: 9000757
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A; Title: Evolutionary shifts in three major structural fa; Reference number: Z18674; MUID: 97315309; PMID: 9169559
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2:8e+05;
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A;Genome: mitochondrion
A;Note: COI
C;Keywords: mitochondrion; oxidoreductase
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A; Note: CO1
C; Keywords: mitochondri
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   C; Keywords:
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C;Species: mitochondrion Myxine glutinosa (Atlantic hagfish)
C;Species: mitochondrion Myxine glutinosa (Atlantic hagfish)
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 21-Jul-2000
C;Accession: T13818
R;Delarbre, C.; Barriel, V.; Tillier, S.; Janvier, P.; Gachelin, G.
Mol. Biol. Evol. 14, 807-813, 1997
A;Title: The main features of the craniate mitochondrial DNA between the ND1 and A;Reference number: Z17775; MUID:97398704; PMID:9254918
A;Reference number: Z17775; MUID:97398704; PMID:9254918
A;Accession: T13818
A;Accession: T13818
A;Accession: T13818
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-8 <DEL>
A;Cross-references: EMBL:Y09527; NID:g2340019; PIDN:CAA70718.1; PID:g2340022
C;Genetics:
A;Genome: mitochondrion
A;Note: COI
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C; Species: Rattus sordidus villosissimus (southeastern Australian rat)
C; Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 05-Nov-1999
C; Accession: A47630
R; Gutman, G.A.; Besta, R.M.; Frank, M.B.; Baverstock, P.R.
Immunogenetics 26, 14-20, 1987
A; Title: Duplication of J-kappa genes within genus Rattus.
A; Reference runmber: A47630; MUID:87278355; PMID:3111993
A; Accession: A47630
A; Accession: A47630
A; Status: preliminary; not compared with conceptual translation
A; Molecule type: DNA
A; Residues: 1-13 < GUT>
A; Residues: 1-13 < GUT>
C; Keywords: heterotetramer; immunoglobulin
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[Species: Mus musculus (house mouse)

[Species: Musculus (house)

[Species: Musculus (h
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Pred. No. 2.2e+03;
0; Mismatches 1;
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Pred. No. 2.2e+03;
0; Mismatches 1;
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Best Local Similarity 66.7%;
Matches 2; Conservative
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RESULT 15
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Cytochrome-c oxidase (EC 1.9.3.1) chain I - Dipsosaurus dorsalis mitochondrion (fragment C; Species: mitochondrion Dipsosaurus dorsalis
C; Species: mitochondrion Dipsosaurus dorsalis
C; Species: mitochondrion Dipsosaurus dorsalis
C; Species: 3-4ul-1999 #sequence_revision 23-Jul-1999 #text_change 22-Oct-1999
C; Accession: T12303
R; Schulte, J.A.; Macey, J.R.; Larson, A.; Papenfuss, T.J.
Mol. Phylogenet: Evol. 10, 367-376, 1998
A; Title: Molecular tests of phylogenetic taxonomies: A general procedure and example usi
A; Accession: T12303
A; Accession: T12303
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Molecule type: DNA
A; Residues: 1-10 < SCH>
A; Cross-references: EMBL:AF049857; NID:g4105726; PID:g4105729; PIDN:AAD02514.1
C; Genetics:
A; Genome: mitochondrion; oxidoreductase
C; Keywords: mitochondrion; oxidoreductase
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C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 22-Oct-1999 C;Accession: T17057
R;Macey, J.R.; Larson, A.; Ananjeva, N.B.; Papenfuss, T.J.
J. Mol. Evol. 44, 660-674, 1997
A;Title: Evolutionary shifts in three major structural features of the mitochondin A;Reference number: Z18674; MUID:97315309; PMID:9169559
A;Accession: T17057
A;Accession: T17057
A;Accession: T17057
A;Accession: T1057
A;Cross-references: EMBL:U82681; NID:g3603108; PID:g3603111; PIDN:AAC62272.1
C;Genetics:
A;Genome: mitochondrion
A;Note: COI
C;Keywords: mitochondrion; oxidoreductase
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Pred. No. 2.6e+03;
); Mismatches 1;
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ALIGNMENTS

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                                                                                                       Streptococcus pneumoniae
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                                                                                                                         Streptococcus pneumoniae.
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Zeiler JL;
                                    AAY30351;
                                                                                                       vaccine;
RESULT 1
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New peptides corresponding to Streptococcus pneumoniae PsaA, used for treating or preventing Streptococcus pneumoniae infection in a

WPI; 1999-540849/45.

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AAY30351-54 represent immunogenic peptides which are derived fro a pneumoccocal surface adhesion A protein (PsaA). The specificat describes monoclonal antibodies which bind epitopes of the PsaA (e.g present sequence). The peptides can be used in vaccines to Streptococcus pneumoniae infections. The antibodies of the invencan also be used to detect S. pneumoniae in a sample or individu
                                         Page 43; 58pp; English
                                        9
                                        Claim
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prevent protein Gaps ö 8 Indel Length ore 28; DB 20; ed. No. 1.1e+02; Mismatches 3 Score 28; Pred. No. .; 0 90.3%; ilarity 50.0%; Conservative Similarity 3; Conserv 15 AA; Query Match Best Local (Sequence Matches

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RESULT 2 AAE19239

standard; AAE19239

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peptide;

AAE19239

entry) (first 21-MAY-2002

Streptococcus pneumoniae PsaA immunogenic peptide #1

infection; immunity; inf
antibacterial immunogenic; tein A; PsaA; Multiple antigenic peptide; MAP; immuno; pneumococcal surface adhesin protein A;

Streptococcus pneumoniae

WO200204497-A2

17-JAN-2002

2001WO-US21626 10-JUL-2001; 2000US-0613092 10-JUL-2000;

SERVICES & HUMAN HEALTH DEPT Ω S (USSH)

Carlone Sampson JS, Jue DL, Johnson SE, Ades EW,

2002-195762/25 WPI;

A or cal antigenic peptide for immunizing against streptococ vinds to monoclonal antibody obtained in response to vanimal with pneumococcal surface adhesion protein infections, binds to immunizing an animal multiple fragment

56; 86pp; English. 2; Page Claim

The invention relates to multiple antigenic peptides (MAP) immunogenic against Streptococcus pneumoniae. MAP binds to monoclonal antibody obtained in response to immunising an animal with pneumococcal surface adhesion protein A (PsaA) or its fragment. MAP is useful for conferring protective immunity against S. pneumoniae infection in a subject. The present sequence is Streptococcus pneumoniae PsaA immunogenic peptide.

15 AA; Sequence

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AAE26751 RESULT

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AAE26751;

(first entry) 13-DEC-2002

#3.

loop

Fibrin binding

Fibrin binding peptide; thrombosis; pulmonary embolism; atherosclerosis; myocardial infarct; ischaemia; imaging; rheumatoid arthritis; vasotropic; anaemia; hypoxia; tumour; diabetic retinopathy; autoimmune disorder; inflammatory disorder; angiogenesis; stroke; cerebroprotective.

Unidentified

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WO200255544-A2

18-JUL-2002

2001WO-US49534 21-DEC-2001; 2000US-0747403. 23-DEC-2000;

CORP (DYAX-) DYAX

Sato AK; JP, Beltzer Wescott CR,

2002-666875/71 WPI;

or Novel synthetic fibrin-binding moiety, useful for detecting, imaging localizing fibrin-containing clots by magnetic resonance imaging, radioimaging and for treating diseases involving thrombus formation e.g. stroke -

55; 89pp; English. Page Claim 4;

The invention relates to a synthetic fibrin binding group having affinity for fibrin. The involves (a) detectably labelling the binding group, (b) administering to the subject the labelled polypeptide, and (c) detecting the labelled polypeptide, and (c) detecting the labelled polypeptide in the subject. The invention is useful for the treating a disease involving thrombous about thrombous thrombous the labelled polypeptide in the subject. The invention is useful for the labelled polypeptide in the subject. The binding moieties are useful infarct, reperfusion ischaemia or stroke. The binding moieties are useful infarct, reperfusion ischaemia or stroke. The binding moieties are useful infarct, reperfusion ischaemia or stroke. The binding moieties are useful or the diagnosis and treatment of coronary conditions where fibrin plays a role. The fibrin binding moieties are useful for detecting and diagnosing numerous pathophysiologies in which fibrin plays a role eg. peritoneal adhesions which often occur after surgery or inflammatory and neoplastic processes and are comprised of a fibrin centuritis, lupus or septic arthritis which often have bits of fibrin containing tissues called rice bodies in the synovial fluid of their arthritis, lupus or septic arthritis which often have bits of fibrin arterioles causes turbulent blood flow resulting in stress and destruction of red blood cells. The fibrin specific agents can also be containing tissues turbulent blood flow resulting in stress and destruction of red blood cells. The fibrin specific agents can also be retinopathy, early or high-risk atherosclerosis and other autoimmune and inflammatory disorders. Fibrin specific agents also could provide both direct or surrogate markers of disease models in which hypoxia and anglosensis are expected to play a role. The invention is also useful for screening molecular libraries. The present sequence is a fibrin binding loop

A. σ Sequence

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The invention relates to a synthetic fibrin binding group having affinity for fibrin. The invention is useful for detecting fibrin in a mammalian subject which involves (a) detectably labelling the binding group; (b) administering to the subject the labelled polypeptide, and (c) detecting the labelled polypeptide, and (c) detecting the labelled polypeptide, and (c) detecting the labelled polypeptide in the subject. The invention is useful for treating a disease involving thrombus formation eg. deep-vein thrombosis, pulmonary embolism, cardiogenic thrombosis, atherosclerosis, myocardial infarct, reperfusion ischaemia or stroke. The binding moieties are useful for detection, imaging and localisation of fibrin-containing clots by magnetic resonance imaging, radioimaging and other imaging methods and are also useful in the diagnosis and treatment of coronary conditions where fibrin plays a role. The fibrin binding moieties are useful for detecting and diagnosing numerous pathophysiologies in which fibrin plays a role eg. peritoneal adhesions which often occur after surgery or inflammatory and neoplastic processes and are comprised of a fibrin network, fibroblasts, macrophages and new blood vessels; rheumatoid arthritis, lupus or septic arthritis which often have bits of fibrin containing tissues called rice bodies in the synovial fluid of their joints; thrombootycopenic purpura, a type of anaemia in which deposits in other organs, as well as the detection of tumours, as well as the detection of tumours, and other autoimmne and teningmatory disorders. Pibrin specific agents also could provide both direct or surrogate markers of disease models in which hypoxia and
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                                                                                                                                                                                                                                                                                                                                                         Fibrin binding peptide; thrombosis; pulmonary embolism; atherosclerosis; myocardial infarct; ischaemia; imaging; rheumatoid arthritis; vasotropic; anaemia; hypoxia; tumour; diabetic retinopathy; autoimmune disorder; inflammatory disorder; angiogenesis; stroke; cerebroprotective.
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localizing fibrin-containing clots by magnetic resonance imaging,
radioimaging and for treating diseases involving thrombus format:
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    expected to play a role.
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and inhibiting cell
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AAB01506 standard; peptide; 6 AA.

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                                                                                                                                                                                                                                                                     transcription fact for the treatment
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disorder;
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                                                                     cycle; DP
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                                                                    factor; E2F; E2F-1; cell apoptosis; proliferative
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ed. No. 9.3e+05;
Mismatches 3;
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e progression, useful
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Pred. No. 9
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                                                                  ng; transcription f
1; transcription; a
restenosis.
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larity 50.0%;
Conservative
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les 3; Conser
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                                                                  DNA binding;
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                                                                                                                                                                                    factor E2F and inhibit cell cycle progression may be useful as research agents to investigate the interaction between E2F and DP-1, or the activation of transcription by E2F-1/DP-1 heterodimers. They may also be used for inducing apoptosis and/or cell cycle arrest in a cell, particularly for treatment of cancer or other proliferative disorders such as psoriasis and restenosis.
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for the treatm
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Pred. No. 9.3e+05
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                                                  The present invention relates to peptides (ABR44811-ABR47162 and ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein from Staphylococcus aureus. The peptide fragments are useful in prophylaxis or treatment of diseases or disorders involving the CSa-receptor (CSaR) and/or formylated peptide receptor (FPR) or neutrophils, monocytes and endothelial cells or involving acute chronic inflammation reactions. The diseases or disorders include cardiovascular diseases, disease of the central nervous system, gastrointestinal diseases, skin diseases, genitourinary diseases diseases, respiratory diseases and HIV infection.
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                                                                                                                                                                                                                             Score 26; DB 24;
Pred. No. 9.3e+05;
; Mismatches
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                            English.
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50.0%;
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diseases,
                      lal cells or involving acute or diseases or disorders include the central nervous system,
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                                                               setinal diseases, skin diseases, genitourinary respiratory diseases and HIV infection.
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Pred. No. 9.3e+05;
1; Mismatches 3;
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                       endothelial
chrophils, monocytes and endothelial chronic inflammation reactions. The dicardiovascular diseases, disease of the gastrointestinal diseases, skin diseases, respirations.
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diseases, respira
                                                                                                        6 AA;
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ological;
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the
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               Length
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Pred. No. 9.3e+05;
); Mismatches 3;
              ore 26; DB 24; ]
ed. No. 9.3e+05;
Mismatches 3;
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               Score
Pred.
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ilarity 50.0%;
Conservative
             83.9%;
ilarity 50.0%;
Conservative
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                                                                                                                                                                   ABR45370 standard; Peptide;
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Query Match
Best Local Similarity
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Van Strijp
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Best Local S
Matches 3
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                                                                           CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR; formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cinflammation; cardiovascular disease; central nervous system disease; gastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammatory; cardiant; cerebroprotective; neuroprotective; nootropic; dermatologic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or neutrophils, monocytes and endothelial cells or involving acute of chronic inflammation reactions. The diseases or disorders include cardiovascular diseases, disease of the central nervous system, gastrointestinal diseases, skin diseases, genitourinary diseases, diseases, infection.
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                                                   CHIPS-related peptide #615
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9.3e+05;
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Pred. No.
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ilarity 50.0%;
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Van Strijp JAG;
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                                                                          WO2003006048-A1
                                            Staphylococcus
 disease;
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                                         CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR; formylated peptide receptor; FPR; neutrophil; monocyte; endothel inflammation; cardiovascular disease; central nervous system disgastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammaticardiant; cerebroprotective; neuroprotective; nootropic; dermato gynecological; immunosuppressive; anti-HIV.
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Staphylococcus aureus (CHIPS) having CHIPS activity, useful
prophylaxis and treatment of inflammation, cardiovascular, skidney diseases
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                       CHIPS-related peptide #616
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Pred. No. 9.3e+05,
0; Mismatches
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(first entry)
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Synthetic.
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   antiinflammatory
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respiratory disease; HIV infection;
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9.3e+05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 26;
Pred. No. 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gosselaar-de Haas
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ilarity 50.0%;
Conservative (
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Synthetic.
                                                                                                                                   aureus
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cell;
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                                                                                                                                                                                   in from
                                                                                                                                                                                                                                                                                                                                                                                       joint
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                                                                                                                                                                                of peptides derived from chemotaxis inhibiting prote sus aureus (CHIPS) having CHIPS activity, useful in and treatment of inflammation, cardiovascular, skin
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Pred. No. 9.3e+05;
Mismatches
                                                                                                                    Gosselaar-de Haas CJC,
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larity 50.0%;
Conservative
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3; Conser
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                                                                                                                                                                                                            prophylaxis and
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                                                                                                                    CPM,
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                                                                                                                                 JAG;
                                                                                                                                                                                                                            diseases
                                                                                                                                                                                                Staphylococcus
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                                       11-JUL-2001;
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                                                                                                                                                                                    Combination
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               23-JAN-2003
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                                                                                                                                 Strijp
                                                                                                                   Kessel
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Best Local
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PHARM BV

(JARI-) JARI

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(CHIPS)
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                                                          chemotaxis inhibiting protein from CHIPS activity, useful in tion, cardiovascular, skin and
                                                                                                                                                                                                                                                        joint
                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   formylated peptide receptor; FPR; neutrophil; monocyte; endothelial inflammation; cardiovascular disease; central nervous system disease gastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammatory; cardiant; cerebroprotective; neuroprotective; nootronic:
                                                                                                                                 ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (from Staphylococcus aureus. The peptide fragments are useful in the prophylaxis or treatment of diseases or disorders involving the C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or neutrophils, monocytes and endothelial cells or involving acute or chronic inflammation reactions. The diseases or disorders include gastrointestinal disease, disease of the central nervana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
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 JAW;
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 Kruijtzer
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                                                                                                                                                                                                                                                                                                                    ore 26; DB 24;
ed. No. 9.3e+05;
Mismatches 3
                                                            nation of peptides derived from chemot
lococcus aureus (CHIPS) having CHIPS
laxis and treatment of inflammation,
                                                                                                                                                                                                                                                                                                                      Score 26;
Pred. No.
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aga,
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aureus (CHIPS) having
                                                                                                                            13; 89pp; English.
  Gosselaar-de Haas
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard; Peptide;
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                                     2003-247783/25
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3; Conserv
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                                                                                                                            Disclosure; Page
                                                                                                                                                                                                                                                      gastrointestinal
diseases, respir
                                                                                                                                                                                                                                                                                               6 AA;
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JAG;
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                                                                                                   diseases
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 Kessel CPM,
Strijp JAG;
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                                                                           Staphylococcus
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                                                               Combination
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Matches
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                                                                                                                                                                                                                                                                                              Sequence
                                                                                                   kidney
                                     WPI;
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(CHIPS)
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                                           The present invention relates to peptides (ABR44811-ABR47162 and ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein from Staphylococcus aureus. The peptide fragments are useful in sprophylaxis or treatment of diseases or disorders involving the C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or neutrophils, monocytes and endothelial cells or involving acute chronic inflammation reactions. The diseases or disorders include cardiovascular diseases, disease of the central nervous system, gastrointestinal diseases, skin diseases, genitourinary diseases diseases, respiratory diseases and HIV infection.
 inflammation, cardiovascular, skin
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                                                                                                                                                                 Length
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                                                                                                                                                               Score 26; DB 24;
Pred. No. 9.3e+05;
Mismatches
                           Page 13; 89pp; English
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larity 50.0%;
Conservative
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 treatment
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Best Local Similarity
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and
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          kidney diseases
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prophylaxis
                           Disclosure;
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                                                                                                                                               Sequence
                                                                                                                                                                                                                                              RESULT 18
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sotropic; Fibrin binding peptide, thrombosis, pulmonary embolism, atherosclerosis, myocardial infarct, ischaemia, imaging, rheumatoid arthritis, vasotropic anaemia, hypoxia, tumour, diabetic retinopathy, autoimmune disorder, inflammatory disorder, angiogenesis, stroke, cerebroprotective. Unidentified

Fibrin binding peptide #28.

WO200255544-A2

18-JUL-2002

2001WO-US49534 21-DEC-2001; 2000US-0747403 23-DEC-2000;

CORP. (DYAX-) DYAX

Sato AK; JP, Beltzer G, Wescott

WPI; 2002-666875/71

or ging ion Novel synthetic fibrin-binding moiety, useful for detecting, imalocalizing fibrin-containing clots by magnetic resonance imaging radioimaging and for treating diseases involving thrombus format e.g. stroke

Claim 4; Page 55; 89pp; English.

The invention relates to a synthetic fibrin binding group having affinity for fibrin. The invention is useful for detecting fibrin in a mammalian subject which involves (a) detectably labelling the binding group; (b) administering to the subject the labelled polypeptide, and (c) detecting the labelled polypeptide in the subject. The invention is useful for treating a disease involving thrombus formation eg. deep-vein thrombosis, pulmonary embolism, cardiogenic thrombosis, atherosclerosis, myocardial infarct, reperfusion ischaemia or stroke. The binding moieties are useful

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magnetic resonance imaging, radioimaging and other imaging methods and
magnetic resonance imaging, radioimaging and other imaging methods and
are also useful in the diagnosis and treatment of coronary conditions
where fibrin plays a role. The fibrin binding moieties are useful for
detecting and diagnosing numerous pathophysiologies in which fibrin plays

a role eg. peritoneal adhesions which often occur after surgery or
inflammatory and neoplastic processes and are comprised of a fibrin
network, fibroblasts, macrophages and new blood vessels; rheumatoid
arthritis, lupus or septic arthritis which often have bits of fibrin
containing tissues called rice bodies in the synovial fluid of their
joints; thrombocytopenic purpura, a type of anaemia in which deposits in
arterioles causes turbulent blood flow resulting in stress and
arterioles causes turbulent blood flow resulting in stress and
destruction of red blood cells. The fibrin specific agents can also be
cor other organs, as well as the detection of tumours, diabetic
retinopathy, early or high-risk atherosclerosis and other autoimmune and
inflammatory disorders. Fibrin specific agents also could provide both
direct or surrogate markers of disease models in which hypoxia and
angiogenesis are expected to play a roll or invention is also useful
angiogenesis are expected to play a roll or invention is also useful
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                                                                                                                                                                                                                                                                                                                              role. The invention is also useful The present sequence is a fibrin
   fibrin-containing clots by
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 26; DB 23; I
Pred. No. 9.3e+05;
; Mismatches 3;
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 of
   imaging and localisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 2.1; Page 159; 219pp; English
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Christensen DJ;
                                                                                                                                                                                                                                                                                                                                              for screening molecular libraries.
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98US-0099656.
99US-0115345.
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                                                                                                                                                                                                                                                                                                                                                                    binding peptide.
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   detection,
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McDonnell DP,
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09-SEP-1998;
08-JAN-1999;
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                The present invention describes a method tor present... Lains novel oligome activity of new receptor modulating compounds (I) using novel oligome peptides (blokeys) which have differential abilities to bind to 2 different receptor conformations. The method is used to identify new drugs that are physiological or pharmacological agonists/antagonists that target various receptors, which are involved in certain disease conditions. The system may be used as a primary screening tool to identify hits, to classify lead compounds from a drug screen to, characterise selective oestrogen receptor modulators (SERMs) in terms agonist and antagonist function and to predict possible clinical effe of SERMs such as tissue and receptor specificity. The method can also applied to the fractionation of mixtures of SERMs to determine which applied to the fractionation of mixtures of SERMs to determine which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           including
                                                                                                                                                                                                                                                                                                                  components are producing agonistic and antagonistic activity. The may be used with other receptors (e.g. progesterone, androgen, glucocorticoid, thyroid, vitamin D, beta-adrenergic, dopamine and epidermal growth factor, to identify, characterise and classify modulators of receptor activity. Peptides comprising a LXXLL motif be used to modulate the oestrogen receptor in treating e.g. breast ovarian cancer and ameliorating the effects of menopause, including osteoporosis. AAY65439 to AAY65652 represent oestrogen receptor, estradiol receptor and oestrogen response element binding peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  represent oestrogen receptor, sponse element binding peptid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            in the exemplification of the present invention. AAZ35740 represent oligonucleotides used in the exemplification of
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15 AA; Sequence

ö Gaps ö Length 15 Indels ore 26; DB 21; 19d. No. 2.4e+02; Mismatches 3; Score Pred. ·; 83.9%; .larity 50.0%; Conservative Similarity 3; Conserv Query Match Best Local Best Loc Matches

9 1 WXXWXF

WYDWTF œ

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RESULT

ABB990

ABB99042 standard; Peptide;

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15

ABB99042

entry) (first 24-JAN-2003 9.13 N-terminal peptide sequence Serine/threonine protein kinase

protein kinase 9.13; enzyme; tumour; protein metabolic disorder Serine/threonine

embryonic development

Unidentified

CN1352273-A

05-JUN-2002

02-NOV-2000; 2000CN-0127173

2000CN-0127173 02-NOV-2000; CO LTD SHANGHAI BODE GENE DEV (BODE-)

Xie Y; Mao Y,

2002-637138/69 WPI;

ng protein 9.13 polypeptide for various tumours and p tumours protein kinase malformation, embryonic development metabolic disorder serine/threonine

Chinese (disclosure); 35pp; 21 5; Page Example

9.13 The present invention discloses a serine/threonine protein kinase

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the polynucleotides encoding the polypeptide, and a DNA recombination process to produce the polypeptide. The present invention also discloses applying the polypeptide in treating various diseases, such as embryonic development malformation, various tumours and protein metabolic disorder. The present invention also discloses the antagonist resisting the polypeptide and its treatment effect. The current sequence represents the serine/threonine protein kinase 9.13 N-terminal peptide sequence.
       88888888888
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15 AA; Sequence

Gaps ö Length 15 Indels ω~. 26; DB 23; No. 2.4e+02 Mismatches Score Pred. ö 83.9%; 50.0%; Conservative Similarity ., M Query Match Best Local S Matches

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11 9 WLFWSF WXXWXF н 9 a ð

RESULT AAE2675

standard; peptide; 15 AA AAE26759

AAE26759;

entry) (first 13-DEC-2002

Fibrin binding peptide

#12

Fibrin binding peptide; thrombosis; pulmonary embolism; atherosclerosis; myocardial infarct; ischaemia; imaging; rheumatoid arthritis; vasotropic; anaemia; hypoxia; tumour; diabetic retinopathy; autoimmune disorder; inflammatory disorder; angiogenesis; stroke; cerebroprotective.

Unidentified

WO200255544-A2

18-JUL-2002

2001WO-US49534 21-DEC-2001; 2000US-0747403 23-DEC-2000;

CORP. (DYAX-) DYAX

AK; Sato JP, Beltzer g, Wescott

WPI; 2002-666875/71

or imaging Novel synthetic fibrin-binding moiety, useful for detecting, imaging localizing fibrin-containing clots by magnetic resonance imaging, radioimaging and for treating diseases involving thrombus formation stroke e 9

58; 89pp; English. Claim 10; Page The invention relates to a synthetic fibrin binding group having affinity for for fibrin. The invention is useful for detecting fibrin in a mammalian subject which involves (a) detectably labelling the binding group; (b) administering to the subject the labelled polypeptide, and (c) detecting the labelled polypeptide in the subject. The invention is useful for treating a disease involving thrombosis, atherosclerosis, myocardial infarct, reperfusion ischaemia or stroke. The binding moieties are useful con detection, imaging and localisation of fibrin-containing clots by magnetic resonance imaging, radioimaging and other imaging methods and are also useful in the diagnosis and treatment of coronary conditions where fibrin plays a role. The fibrin binding moieties are useful for detecting and diagnosing numerous pathophysiologies in which fibrin plays a role eg. peritoneal adhesions which often occur after surgery or inflammatory and neoplastic processes and are comprised of a fibrin network, fibroblasts, macrophages and new blood vessels; rheumatoid

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arthritis, lupus or septic arthritis which often have bits of fibrin containing tissues called rice bodies in the synovial fluid of their joints; thrombocytopenic purpura, a type of anaemia in which deposits in arterioles causes turbulent blood flow resulting in stress and destruction of red blood cells. The fibrin specific agents can also be used to detect hypoxia or ischaemia of heart, kidney, liver, lung, brain or other organs, as well as the detection of tumours, diabetic retinopathy, early or high-risk atherosclerosis and other autoimmune and inflammatory disorders. Fibrin specific agents also could provide both direct or surrogate markers of disease models in which hypoxia and angiogenesis are expected to play a role. The invention is also useful for screening molecular libraries. The present sequence is a fibrin binding peptide.
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15 AA; Sequence

Length 15; Indels Score 26; DB 23; L Pred. No. 2.4e+02;); Mismatches 3; ô 83.9%; llarity 50.0%; Conservative Query Match Best Local Similarity 3, Conserve 9 WXXWXF Н ઠે

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Gaps

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6 WGSWKF 셤

RESULT

AAU86245

AAU86245 standard; Peptide; 15 AAU86245;

(first entry) 21-MAY-2002

SPT. Oestrogen receptor alpha binding peptide

cancer; combinatorial peptide library Oestrogen receptor; breast ca receptor modulating compound.

Synthetic

WO200204956-A2

17-JAN-2002

11-JUL-2001;

2000US-0614865. 2001US-0860688. 12-JUL-2000; 21-MAY-2001;

BIO USA INC (KARO-) KARO

Buehrer TR, Barnett ٦, Fowlkes

WPI; 2002-154969/20.

combinatorial sss one 88 Identifying receptor-binding peptides comprises screening combin peptide library presented in form of cells each of which coexpre peptide member and receptor with signal producing system for rep binding

Disclosure; Page 142; 175pp; English.

๙ receptor receptor of ducing The invention relates to identifying a binding peptide which binds a receptor and which is a member of a combinatorial library of peptides, comprising screening a combinatorial peptide library presented in the form of cells which coexpress the receptor or its ligand-binding receptorety and one member of the library, together with a signal producing system for reporting binding of the peptide to the receptor. Also included is a method for predicting the receptor-modulating activity of compound which modulates the biological activity of a receptor comprising (a) identifying peptides which bind the receptor by the method above, (b) using a number of the peptides to predict the recept modulating activity of a compound by (i) providing a panel of

covered

immobilising it on related to anti-DNA

nt prepd. by of diseases

adsorbing agent for treatment or

and an useful

peptide and

carrier

92JP-0261821.

30-SEP-1992;

(KURS) KURARAY CO LTD

WPI; 1994-260510/32

93JP-0006098

18-JAN-1993;

12-JUL-1994

The sequences given in AAR57386-413 are peptides which are all

12771.7

Disclosure; Page 11; 14pp; Japanese

antibodies and immune complexes

to the receptor depending on reference conformations the receptor is

in, where the effect of a number of reference substances known to

modulate the biological activity of the receptor on the binding of each

member of the panel is known and is characterised as a reference

fingerprint for each reference substance, (ii) screening a test substance

of unknown activity relative to the receptor to determine its effect on

the binding of each member of the panel to the receptor, thereby

obtaining a test fingerprint for the test substance, (iii) comparing the

test fingerprint to the reference fingerprints and (iv) predicting the

test fingerprints. The method is useful for identifying a binding

peptide which binds a vertebrate, mammalian, preferably human receptor,

an intracellular, nuclear, oestrogen or androgen receptor. The identified

peptides which bind to the receptor are useful for predicting the

creeptor-modulating activity of a compound (e.g. ant/agonists).

The receptor-binding library members are useful in the prediction of the

ability of small organic molecules, suitable for pharmaceutical use

(e.g. in the case of oestrogen receptors, for breast cancer treatment),

to interact with the receptor. The analyte-binding molecules can also be

used for in vivo imaging. The method has several advantages over whole

animal-based assay systems in that the same technology can be applied to

throughput sereening and compound characterisation, and gives very ö distinct patterns for agonists and antagonists of receptor activity using very much less protein. The present sequence is an oestrogen receptor binding peptide from a combinatorial peptide library. to bind compex Gaps ability Carrier; absorbing agent; treatment; anti-DNA antibody; immune ö treating diseases related to anti-DNA antibodies Indels Length 26; DB 23; No. 2.4e+02; where the members differ Mismatches Score Pred. standard; Protein; 6 AA. ö 83.9%; entry) Conservative (first identified peptides Similarity 9 15 AA; 1 WXXWXF WYDWTF JP06192290-A. Peptide for 21-MAR-1995 Э, Synthetic AAR57391; AAR57391 Sequence Query Match Best Local Matches RESULT AAR5739 엄 ð

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disorder;
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= a bond or Asp, Glu, Arg, Lys, His or s
consisting of 2-10 residues, provided
X or Y are present;
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Pred. No. 9.3e+05;
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9.3e+05;
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                                                                                              transcription factor E2F-1 DNA binding domain.
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and inhibiting cell cycle progression,
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standard; peptide;
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gynecological; immunosuppressive;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell inflammation; cardiovascular disease; central nervous system disease; gastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammatory; cardiant; cerebroprotective; neuroprotective; nootropic; dermatological;
                                                                                                                                                                                                                                                                                                                                                                  E2F
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                                             to transcription factor E2F-1 DNA binding do
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sell cycle arrest other proliferat
                                                                                                                                                                                                                                                                                                                                                                                                                              Peptides which bind to the DNA binding domain of transcription factor E2F and inhibit cell cycle progression may be useful as research agents to investigate the interaction between E2F and or the activation of transcription by E2F-1/DP-1 heterodimers. may also be used for inducing apoptosis and/or cell cycle arres a cell, particularly for treatment of cancer or other prolifers disorders such as psoriasis and restenosis.
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                                                                  cycle; DP.
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                                                                  factor; E2F; E2F-1; cell apoptosis; proliferative
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Pred. No. 9.3e+05
; Mismatches
                                                                                                                                                                                                                                                                                                                                                                 the DNA binding domain of cycle progression, useful
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                                                                                                                                     Location/Qualifiers
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ilarity 83.3%;
Conservative
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                                                                DNA binding; transcription activation; transcription; psoriasis; restenosis.
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                        entry)
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and inhibiting cell
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nes 5; Conser
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AAB01499;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            chemotaxis inhibiting protein from CHIPS activity, useful in tion, cardiovascular, skin and
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ed. No. 9.3e+05;
Mismatches 3
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Staphylococcus aureus (CHIPS) having CHIPS
prophylaxis and treatment of inflammation,
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Pred. No.
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Similarity 50.0%;
3; Conservative
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Van Strijp JAG;
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Combination of peptides derived from chemotaxis inhibiting protein from Staphylococcus aureus (CHIPS) having CHIPS activity, useful in prophylaxis and treatment of inflammation, cardiovascular, skin and kidney diseases
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                                                                                                      12; 89pp; English.
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                                                                                                        Disclosure; Page
                                                                                                                                                                                                                           gastrointestinal
diseases, respira
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JAG;
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Strijp
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Best Local
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aureus (CHIPS) having CHIPS activity, useful in
d treatment of inflammation, cardiovascular, skin
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                                                                                   Kruijtzer JAW;
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Pred. No. 9.3e+05
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                                                                                  CJC,
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                                                                                   Gosselaar-de
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50.0%;
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              2001WO-EP08004
                                   11-JUL-2001; 2001WO-EP08004
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Synthetic.
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JAG;
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             11-JUL-2001;
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The present invention relates to peptides (ABR44811-ABR47162 and ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (from Staphylococcus aureus. The peptide fragments are useful in the prophylaxis or treatment of diseases or disorders involving the C5a-receptor (C5a, and/or formylated peptide receptor (FPR) or neutrophils, monocytes and endothelial cells or involving acute or chronic inflammation reactions. The diseases or disorders include cardiovascular diseases, disease of the central nervous system, in a serie of the central nervous system,
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                                  otides (ABR44811-ABR47162
Chemotaxis Inhibitory Pro
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                                                                                                                                                                                Score 25; DB 24;
Pred. No. 9.3e+05;
0; Mismatches 3
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Staphylococcus aureus (CHIPS) having CHIPS
prophylaxis and treatment of inflammation,
                                ABR47164-ABR47385) derived from the Chemot from Staphylocorne .....
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            Disclosure; Page 12; 89pp;
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                                                  nervous system,
ourinary diseases,
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and endothelial cells or involving sactions. The diseases or disorders
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ed. No. 9.3e+05;
Mismatches 3
                                                                                                                                                                                              Score 25;
Pred. No. 9
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ilarity 50.0%;
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     monocytes
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3; Conserv
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Synthetic.
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Van Strijp
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Matches
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ABR45368
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dermatory;

neuroprotective; nootropic; ive; anti-HIV.

immunosuppressive;

2001WO-EP08004.

CHIPS-related peptide #614.

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CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR; formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cinflammation; cardiovascular disease; central nervous system disease; inflammation; disease; genitourinary disease; gastrointestinal disease; skin disease; genitourinary disease;
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                                   standard; Peptide;
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Score 25; DB 24;
Pred. No. 9.3e+05;
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Staphylococcus aureus (CHIPS) having CHIPS
prophylaxis and treatment of inflammation,
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Pred. No. 9.3e+05;
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Staphylococcus aureus (CHIPS) having CHIPS
prophylaxis and treatment of inflammation,
                                                                               Gosselaar-de Haas CJC,
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                                                                          ease;
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                                         CHIPS; Chemotaxis Inhibitory Protein; CSa-receptor; CSaR; formylated peptide receptor; FPR; neutrophil; monocyte; endothel inflammation; cardiovascular disease; central nervous system disgastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammat
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                 peptide #669
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Pred. No. 9.3e+05,
0; Mismatches
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                CHIPS-related
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Pred. No. 9.3e+05
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neuroprotective; ive; anti-HIV.
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             gynecological; immunosuppressive;
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peptides derived from chemotaureus (CHIPS) having CHIPS itreatment of inflammation,
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CHIPS; Chemotaxis Inhibitory Protein; CSa-receptor; C5aR; formylated peptide receptor; FPR; neutrophil; monocyte; endothelial celinflammation; cardiovascular disease; central nervous system disease; gastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammatory; cardiant; cerebroprotective; neuroprotective; nootropic; dermatological gynecological; immunosuppressive; anti-HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to peptides (ABR44811-ABR47162 and ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein (from Staphylococcus aureus. The peptide fragments are useful in the prophylaxis or treatment of diseases or disorders involving the
                                                          The present invention relates to peptides (ABR44811-ABR47162 and ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein from Staphylococcus aureus. The peptide fragments are useful in the prophylaxis or treatment of diseases or disorders involving the C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or neutrophils, monocytes and endothelial cells or involving acute or chronic inflammation reactions. The diseases or disorders include cardiovascular diseases, disease of the central nervous system, gastrointestinal diseases, skin diseases, genitourinary diseases, diseases, respiratory diseases and HIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Staphylococcus aureus (CHIPS) having CHIPS activity, useful in prophylaxis and treatment of inflammation, cardiovascular, skin skidney diseases
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Pred. No.
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                                13; 89pp; English.
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The present invention describes a composition (I) comprising stress protein-peptide complexes (SPPC) associated with tumours that is specifically immunogenically cross-reactive with cell surface-associated SPPCs specific to target cancer (TC). Also described is an isolated antigen-binding fragment of an antibody that binds specifically to SPPCs or a population of different SPPCs consisting of immunogenic cancer cell surface-associated SPPC of TC. (I) has cytostatic activity and can be surface-associated SPPC of TC. (I) has cytostatic activity and can be surface-associated SPPC of TC. (I) has cytostatic activity and can be subject, such as astrocytoma, fibrosarcoma, myxosarcoma, ilposarcoma, coligodendroglioma, ependymoma, medulloblastoma, and primitive neural cetodermal tumour (PNET). (I) is useful as cancer immunogen including vaccines. (I) is useful for diagnostic and palliative use, for detecting vaccines. (I) is useful for monitor the course of amelioration of
                                                                                                                                                                                                                                                                                                                                                                                                                                                   immunogenically cross-reactive; cancer; immunogenic cancer cell; cytostatic; vaccine; tumour-specific immunogenic response inducer; astrocytoma; fibrosarcoma; myxosarcoma; liposarcoma; oligodendroglioma; ependymoma; medulloblastoma; primitive neural ectodermal tumour.
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      neutrophils, monocytes and endothelial cells or involving acute or chronic inflammation reactions. The diseases or disorders include cardiovascular diseases, disease of the central nervous system,
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and/or formylated peptide
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AAM47109 represent pept
the present invention.
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The present invention describes a 10-50 residue peptide (I) comprising a polymeric immunoglobulin receptor (PIGR)-binding domain. (I) can have antiasthmatic, antiinflammatory, antiinfectious, cytostatic, antiulcer, antidiarrhoeal, hepatotropic, virucide, vasotropic, anti-human immunodeficiency virus and antibacterial activities. (I) can be used for targeting and transport to the mucosal epithelium, for the accessible to mucosal epithelia, including asthma, bronchitis, emphysema, cystic fibrosis, bronchiectasis, bronchiolitis, pulmonary oedema, viral tracheobronchitis, sleep apnea syndrome, infectious diseases, neoplastic conditions, Loffler's syndrome, kyphocliosis, dysphagia, peptic ulcers, diarrhoeal diseases, ulcerative colitis, Crohn's disease, hepatitis, cirrhosis, haemorrhoids, systemic vasculitis, acquired immunodeficiency syndrome, gonorrhea, syphilis and chlamydia. (I) can be attached to a detectable label for use in diagnostics. The present sequence represents a specifically claimed example of (I), derived from the human C-alpha-3
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                                                                                                                                                                                                                                                                                          Polymeric immunoglobulin receptor; plgR; binding domain; diagnosis; identification; infection; cancer; asthma; antiasthmatic; cytostatic; antiinfectious; antidiarrhoeal; hepatotropic; virucide; vasotropic; anti-human immunodeficiency virus; antibacterial; mucosal epithelia; bronchitis; emphysema; cystic fibrosis; dysphagia; bronchiolitis; pulmonary oedema; viral tracheobronchitis; sleep apnea syndrome; kyphocliosis; peptic ulcer; diarrhoeal disease; ulcerative colitis; Crohn's disease; hepatitis; cirrhosis; haemorrhoid; systemic vasculitis; acquired immunodeficiency syndrome; gonorrhea; syphilis; chlamydia; antiulcer.
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Peptides AAW38108-13 function as recognition units of the dystrophin WW domain. They were identified from a random peptide phage display library using the dystrophin WW domain as a probe. The peptides were used as probes themselves to screen a lambda-Exlox mouse 16 day embryo containing WW domains, capable of binding to these peptides are identified. The WW domain is a small functional domain found in a large number of proteins from a variety of species including humans, nematode and yeast. Its name is derived from the observation that two tryptophan residues, one in the amino terminal portion of the WW domain and one in the carboxyl terminal portion, are conserved. Most proteins containing the carboxyl terminal portion, are conserved. Most proteins containing ww domains have a function involving cell signalling and growth regulation or the organisation of the cytoskeleton. Polypeptides containing a WW domain are identified by treating a multivalent recognition unit complex. Proteins selective binding affinity for a WW domain, with many polypeptides and identifying those with selective affinity for the complex. Proteins containing WW domains are used for targeted drug screening, i.e. to identifying those with selective affinity for the complex. Proteins containing WW domains in interactions. The valency of the recognition unit is important in determining specificity of interaction with WW domains. In multivalent form specificity is relaxed, but not lost, so proteins containing WW domains similar, but not identical, to the sequence of the peptides' target WW can be detected, including new polypeptides.
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The invention relates to the identification and isolation of major histocompatibility (MHC) class II restricted T cell epitope (MHC-II epitope) derived from the cancer antigen, NY ESO-1. The MHC-II epitopes from NY ESO-1 are recognised by CD4+ T lymphocytes in an human leucocyte antigen (HLA) class II restricted manner, in particular HLA-DR or HLA-DP restricted. The products of the gene are promising candidates for immunotherapeutic strategies for the prevention, treatment and diagnosis of patients with cancer. The cancer epitopes are useful as immunogen and vaccine to inhibit or to prevent cancer in a mammal by eliciting CD4+ T lymphocytes resulting in protection of the recipient from development of cancer and protection from metastasis, or by inhibiting the growth of cells expressing the NY-ESO-1 gene product. The cancer peptides are also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer and protection from metastasis, or by inhibiting the growth of cancer and protection from metastasis, or by inhibiting the growth of calls expressing the NY-ESO-1 gene product. The cancer peptides are also useful as diagnostic agent to detect the presence of cancer, to enhance the generation of antibody and/or CD8+ T cell responses against any given target antigen and/or hapten and to induce tumour-specific humoral-mediated immunity against cancer. The present sequence is human HLA-DP restricted T cell epitope of NY ESO-1 protein.
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01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
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MHC class II B locus 4 (Fragment).
Pseudotropheus sp. 'Pseudotropheus tropheops complex'.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
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MEDLINE=96001284; PubMed=7559877;
Hashimoto K., Koga M., Motomura T., Kasayama S., Kouhara H.,
Ohnishi T., Arita N., Hayakawa T., Sato B., Kishimoto T.;
"Identification of alternatively spliced messenger ribonucleic acid
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MEDLINE=98315113; PubMed=9649539;
Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew
Figueroa F., Sultmann H., Klein J.;
"Linkage relationships and haplotype polymorphism
class II B loci.";
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ed. No. 8.3e+05;
Mismatches 2
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2.3e+03;
chamaelecular Phylogenetics and Mitochondrial Ger Chamaelecnidae (Reptilia, Squamata).";
Submitted (NOV-2001) to the EMBL/GenBank/DDBJ EMBL; AF448757; AAL90553.1; -.
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Lepidosauría; Squamata; Iguania; Acrodonta; Chamaeleonidae; Chamaeleo
NCBI_TaxID=179917;
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                     01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
66 kDa cell surface adhesin for heparan sulfate (Fragment).
Staphylococcus aureus.
Bacteria; Firmicutes; Bacillales; Staphylococcus.
NCBI_TaxID=1280;
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Liang O.D., Ascencio F., Fransson L.A., Wadstrom T.;
"Binding of heparan sulfate to Staphylococcus aureus
Infect. Immun. 60:899-906(1992).
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(TrEMBLrel. 21, Last sequence update)
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8.3e+05;
2;
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Q38366;
01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update gene product (Fragment).
Bacteriophage phi-X174.
Viruses; ssDNA viruses; Microviridae; Microvirus
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MEDLINE=88118956; PubMed=2963134;
Buckley K.J., Hayashi M.;
"Role of premature translational termination expression of the phiX174 lysis gene.";
J. Mol. Biol. 198:599-607(1987).
EMBL; X07809; CAA30668.1; -.
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Mitochondrion.
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O1-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
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01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
Gonadotropin-releasing hormone, SBGNRH-I.
Sparus aurata (Gilthead sea bream).
Sparus aurata (Gilthead sea bream).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Percoidei
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Allium cepa (Onion).
Chloroplast.
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Asparagales; Alliaceae;
Allium.
NCBI_TaxID=4679;
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MEDLINE=95083645; PubMed=7991588;
MEDLINE=95083645; PubMed=7991588;
Powell J.F., Zohar Y., Elizur A., Park M., Fischer W.H., Craig A.G Rivier J.E., Lovejoy D.A., Sherwood N.M.;
"Three forms of gonadotropin-releasing hormone characterized from brains of one species.";
Proc. Natl. Acad. Sci. U.S.A. 91:12081-12085(1994).
Proc. Natl. Acad. Sci. U.S.A. 91:12081-12085(1994).
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Pred. No. 3.8e+03;
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    DB 8;
8.3e+05;
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09MT61;
01-OCT-2000 (TrEMBLrel. 15, Cr
01-OCT-2000 (TrEMBLrel. 15, La
01-OCT-2000 (TrEMBLrel. 15, La
PSI 9 kDa protein (Fragment).
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50.0%;
ilarity 66.7%;
Conservative
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SEQUENCE FROM N.A.
TISSUE=Leaf;
Lopez-Serrano M., C
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Sparidae, Sparus.
NCBI_TaxID=8175;
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  encoding truncated growth hormone-releasing hormone receptor in
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Bacteria, Proteobacteria, Alphaproteobacteria, Rhodobacterales;
Rhodobacteraceae, Rhodobacter.
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MEDLINE=92234963; PubMed=1569029;
Richter P., Brand M., Drews G.;
"Characterization of LHI- and LHI+ Rhodobacter capsulatus pufA
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Lepidosauria; Squamata; Scleroglossa; Anguimorpha; V
NCBI_TaxID=169843;
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Q94VF6;
Q94VF6;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Cytochrome c oxidase subunit I (Fragment).
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                                                                                                                                                                    Score 20; DB 4; Le
Pred. No. 2.5e+03;
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EMBL; S97552; AAC60406.1; -.
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"Mitochondrial DNA evidence
Cladistics 17:0-0(2001).
EMBL; AF407507; AAL10075.1;
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                            pituitary adenomas.";
J. Clin. Endocrinol. Metal
EMBL; S79912; AAD14318.1;
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Asparagales; Asphodelaceae;
Aloe.
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"Species-specific TaqMan probes for simultaneous identification of (Gadus morhua L.), haddock (Melanogrammus aeglefinus L.) and whiting (Merlangius merlangus L.).";
Mol. Ecol. Notes 2:599-601(2002).
EMBL; AF526615; AAN85062.1; -.
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Mitochondrion.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Paracanthopterygii; Gadiformes; Gadidae; Gadus.
NCBI_TaxID=8049;
                                                                                                                                                                                                                                                     Lopez-Serrano M., del Campo E.M., Sabater B., Martin M.; "Conservation of the start codon by editing in ndhD-encoded transcripts is not restricted to dicotyledonous plants."; Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases. EMBL; AJ278353; CAB96192.1; -. Chloroplast.
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9 kDa protein (Fragment).
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Pred. No. 3.8e+03;
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Spermatophyta, Magnoliophyta, Liliopsida, Asparagales;
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DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
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DE Cytochrome c oxidase subunit I (Fragment).

OC Waranus panoptes panoptes.
OC Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Eupidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Varanu OC NA NEL TaxID=169849;
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RP SEQUENCE FROM N.A.
RA Ast J.C.;
RM Mitochondrial DNA evidence and evolution in Varanoidea (Squamata)."
REMBL; AF407516; AALI0102.1; -.
RW Mitochondrion.
FT NON TER 10 AA; 1299 MW; SDEE80D4136411A7 CRC64;
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to have a being printed, No. is the number of results predicted by chance to h greater than or equal to the score of the result bein derived by analysis of the total score distribution. score gand is Pred.

SUMMARIES

		₩				
Result No.	Score	Query Match	Length	DB	ID	Description
	35		9	21	AAB01505	Peptide which bind
7	35	92.1	9	21	AAB01506	Peptide which bind
m	34	89.5	9	21	AAB01492	Peptide which bind
4	34	89.5	9	21	AAB01499	Peptide which bind
ഹ	29	76.3	9	24	ABR45593	Staphylococcus aur
9	29	76.3	9	24	ABR45594	Staphylococcus aur
7	29	76.3	14	22	AAM00214	Human angiopoietin
8	28	73.7	9	18	AAW28912	Opioid peptide. S
6	28	73.7	9	18	AAR93770	New peptide which

pioid peptide eptide which b	taphylococcus	taphylococcus	5851813 peptid	ptide SEQ ID	tiproliferat	ntiproliferative	if268 mutagenis	S5851813 pep	inger 3 binding	orescein bi	scein bind	ernalising p	ptide specific	inding site	idae LDL rec	nan plate	lutamine-g	uman BLyS bind	aphylococcus	taphylococcus	aphylococcus	taphylococcus a	ibrin binding	ranulocyte-col	regon green 514	regon green 514	ystrophin WW dom	pitope der	ibrin binding p	eptococcus	uman nucleoti	he-Arg contg. an	ptide for treat	eptide wh
AAY23	4559	1 ABR4559	AAY01	2 AAB4972	5 AAR6042	5 AAR6044	5 AAR8349	0 AAY0126	D AAW8438	21 AAY88108	1 AAY8816	2 AAB6003	9 AAW8388	2 AAM4577	3 ABB9049	8 AAW3276	2 AAE1218	3 ABP4620	4 ABR453	4 ABR4531	4 ABR4716	4 ABR47	3 AAE2677	3 AAU9367	1 AAY881	21 AAY88154	82	20 AAY30351	23 AAE26759	23 AAE19239	3 ABP577	3 A.A	5 AAR	21 AAB01493
99	•	9	7	7	œ	80	۵	α	80		12		9	7	80		11		φ	9	9	9	6	თ	12	12	13	15	15	15	15	9	9	φ
73.7	<u>.</u>	۳.	m.	<u>.</u>	3	ω.	m.	ж •	ω.	ω,	Э.	ω.	4	4	H	۲.	H.	ij	8	8	8	80	φ.	ω.	8	ω,	æ.	ω.	8	œ	7.	Ŋ.	5	υ.
28	28	28	28	28	28	N	71	~	7	28	7	~	7	~	7	. 27	~	27	26	26	26	56	26	26	. 26	26	26	26	26	N	25.5	$^{\circ}$	25	25
10	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

AAB01505 standard; peptide; RESULT 1

Z 9

> entry) (first 08-NOV-2000

> > X

AAB01505;

to transcription factor E2F-1 DNA binding domain. Peptide which binds

DNA binding; transcription factor; E2F; E2F-1; cell cycle; DP-1; activation; transcription; apoptosis; proliferative disorder; psoriasis; restenosis.

Synthetic.

WO200044771-A1.

03-AUG-2000.

2000WO-GB00227 26-JAN-2000; 99GB-0001710 26-JAN-1999;

(PROL-) PROLIFIX LTD

Montigiani Kontermann RE, ĸ, Mueller

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WPI; 2000-532806/48

E2F transcription factor for the treatment of Peptides binding to the DNA binding domain of and inhibiting cell cycle progression, useful

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E2F
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They
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in
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                                                                    P-1
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for the treatment of
                                          Peptides which bind to the DNA binding domain of transcription factor E2F and inhibit cell cycle progression may be useful as research agents to investigate the interaction between E2F and DD or the activation of transcription by E2F-1/DP-1 heterodimers. The may also be used for inducing apoptosis and/or cell cycle arrest a cell, particularly for treatment of cancer or other proliferation disorders such as psoriasis and restenosis.
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apoptosis; proliferative
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Pred. No. 9.3e+05;
0; Mismatches 2;
                                                                                                                                                       ore 35; DB 21;
ed. No. 9.3e+05;
Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the DNA binding domain of cycle progression, useful
                                                                                                                                                                                                                                                                                                                                                  to transcription factor
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                                                                                                                                                         Score 35;
Pred. No.
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                       42pp; English.
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ilarity 66.7%;
Conservative
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larity 66.7%;
Conservative
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transcription;
restenosis.
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                                                                                                                                                                   Similarity
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                                                                                                                                                                                                                                                                                                                                                                                   activation;
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                      Example;
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Best Local
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E2F
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                                                                                                                                                                                                                                                                                                                                                                          transcription factor for the treatment of
                                                                                                                                               DP-1;
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                                                                                                                                              cycle; DP-disorder;
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disorder;
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apoptosis; proliferative
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Pred. No. 9.3e+05
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                                                                                                                                                                                                                                                                                                                                                                          domain
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cycle progression,
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4; Conservative
                                                      peptide;
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CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR; formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cellinflammation; cardiovascular disease; central nervous system disease; gastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammatory; cardiant; cerebroprotective; neuroprotective; nootropic; dermatological, gynecological; immunosuppressive; anti-HIV.
                                                                                                                                                                                                                                                                                                                                    factor E2F and inhibit cell cycle progression may be useful as research agents to investigate the interaction between E2F and DP or the activation of transcription by E2F-1/DP-1 heterodimers. The may also be used for inducing apoptosis and/or cell cycle arrest a cell, particularly for treatment of cancer or other proliferati disorders such as psoriasis and restenosis.
                                                                                                                                                                                                                                                                                                                              to the DNA binding domain of transcription
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Pred. No. 9.3e+05;
0; Mismatches 0;
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                                                                                                                                                                                                                                                           the DNA binding domain of cycle progression, useful
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                                                       "Any amino acid"
                                                                                                                                                                                                                Montigiani
                                  .Location/Qualifiers
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                                                                                                                                               6-JAN-2000;
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CHIPS; Chemotaxis Inhibitory Protein; C5a-receptor; C5aR; formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell inflammation; cardiovascular disease; central nervous system disease; gastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammatory; cardiant; cerebroprotective; neuroprotective; nootropic; dermatological; gynecological; immunosuppressive; anti-HIV.
                                                                                                                            combination of peptides derived from chemotaxis inhibiting protein from Staphylococcus aureus (CHIPS) having CHIPS activity, useful in prophylaxis and treatment of inflammation, cardiovascular, skin and kidney diseases
                                                                                                                                                                                                                                                                                                                                        joint
                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                 the
                                                                                                                                                                                                                             The present invention relates to peptides (ABR44811-ABR47162 and ABR47164-ABR47385) derived from the Chemotaxis Inhibitory Protein from Staphylococcus aureus. The peptide fragments are useful in the prophylaxis or treatment of diseases or disorders involving the C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or neutrophils, monocytes and endothelial cells or involving acute or chronic inflammation reactions. The diseases or disorders include cardiovascular diseases, disease of the central nervous system,
                                                                                                                                                                                                                                                                                                                                  gastrointestinal diseases, skin diseases, genitourinary diseases, diseases, respiratory diseases and HIV infection.
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ed. No. 9.3e+05;
Mismatches 2
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illarity 50.0%;
Conservative
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2001WO-EP08004
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Synthetic.
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                                                                                                                2003-247783/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABR45594 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 3; Conserv
                                                   PHARM
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                                                                                                                                                                                                                                                                                                                                                                                6 A.
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                                                                            CPM,
JAG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          WXXWHF
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Van Strijp JAG;
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11-JUL-2001;
                                                   (JARI-) JARI
                          11-JUL-2001;
                                                                                                                                                                                                          Disclosure;
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                                                                            Kessel
Strijp
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Van
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The present invention relates to human nucleic acids containing single nucleotide polymorphisms (SNPs). These can be used in forensic and paternity tests, and to aid in the treatment of diseases associated with aberrant protein expression, including cancer, amyloidosis, diabetes, Alzheimer's disease, Down's syndrome, oedema, lupus (SLE), vasculitis,
                                                                                                                                                                                                                                         disorders include
                                                                                                                                               The present invention relates to peptides (ABR44811-ABR47162 and ABR47164-ABR47163) derived from the Chemotaxis Inhibitory Protein from Staphylococcus aureus. The peptide fragments are useful in the prophylaxis or treatment of diseases or disorders involving the C5a-receptor (C5aR) and/or formylated peptide receptor (FPR) or neutrophils, monocytes and endothelial cells or involving acute chronic inflammation reactions. The diseases or disorders include cardiovascular diseases, disease of the central nervous system, gastrointestinal diseases, skin diseases, genitourinary diseases, diseases, respiratory diseases and HIV infection.
                                          chemotaxis inhibiting prote
CHIPS activity, useful in
Ition, cardiovascular, skin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Isolated human polynucleotides containing single nucleotide polymorphisms, useful for the treatment and diagnosis of e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single nucleotide polymorphism; SNP; paternity test;
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Pred. No. 9.3e+05;
Mismatches
                               compination of peptides derived from chemostaphylococcus aureus (CHIPS) having CHIPS prophylaxis and treatment of inflammation, kidney diseases
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                                                                                                                      Disclosure; Page 13; 89pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             standard; Peptide; 14 AA
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larity 50.0%;
Conservative
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                 WPI; 2003-247783/25
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The patent discloses the following new peptides, which are opioids which bind specifically to the mu receptor: Ac-Phe-Arg-Trp-Trp-Try-Xaa-NH2 (1); Ac-Arg-Trp-Ile-Gly-Trp-Xaa-NH2 (2); Trp-Trp-Pro-Lys-His-Xaa-NH2 (3); Trp-Trp-Pro-Xaal-NH2 (4); Tyr-Pro-Phe-Gly-Phe-Xaa-NH2 (5); Trp-Trp-Pro-Xaal-NH2 (4); Tyr-Pro-Phe-Gly-Phe-Xaal-NH2 (5); Trp-Trp-Met-D-Trp-D-Trp-Gly-Xaa2-NH2 (6); Tyr-Al-B2-C3-NH2 (214); D-Ile-D-Met-D-Thr-D-Trp-Gly-Xaa2-NH2 (7); Tyr-Al-B2-C3-NH2 (214); Trp-Trp-Pro-D4-(His)z-(Xaa)z-NH2 (222); where Xaa = any natural amino acid; Xaal = Lys or Arg; n and z = 0 or 1; Xaa2 = Gly or the D form of any naturally occurring amino acid; Al = D-norvaline or D-norleucine; B2 = Gly, Phe or Trp; C3 = Trp or naphthylalanine; x and y = 0-2, but not over 2 in total; Xaa3 = Phe, DPhe or benzylamino; D4 = Lys or Arg; Pm and red indicate permethylation and reduction of all C0 in peptide links to methylene. These new compounds are useful: (i) for in vitro
                                                                                                                                                                      ö
                   tuberous
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glomerulonephritis, haemolytic anaemia, thrombocytopaenia, arthritis, meningitis, muscular disorders, dementia, neurological diseases, tuberasclerosis, male infertility, hypercalcaemia, blood pressure disorders, osteoporosis, pathogenic infections, hypercholesterolaemia, obesity or autoimmunity. The present sequence is a pepttide encoded by a polymorphism-containing oligonucleotide fragment of the invention.
                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                             enkephalin; mu-opioid receptor ligand; agonist; antagonist
                                                                                                                                         Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New opioid peptides which bind mu receptors specifically agonist or antagonist activity and are used for study and localisation of mu receptors and to treat peripheral side
                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  amide form"
                                                                                                                                      ore 29; DB 22; 3 3d. No. 1.1e+02; Mismatches 2;
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                                                                                                                                       Score 29;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "N-acetyl-Arg"
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ilarity 60.0%;
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bind src
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assay and study of opiate receptor subtypes, particularly mu receptors in the brain; (ii) for in vivo localisation of receptor subtypes; and (iii) therapeutically to block the peripheral effects (e.g. constipation and pruritus) of centrally acting pain killers such as morphine. They are very selective for the mu opioid receptor, over binding to the delta and kappa receptor subtypes.

The present sequence is a specific example of a peptide (2).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The patent discloses eight new groups of opioid peptides which bind to the mu-receptor to act as agonists or antagonists. The peptides can be used for in-vitro assays to study opiate receptor subtypes (especially the mu type) in brain or other tissue samples; and for in-vivo diagnosis to localise opioid subtypes. The peptides are also useful as drugs to treat pathologies associated with other compounds which interact with the opioid receptor system. Therefore they can be used in medicaments for treating pathologies associated with the mu receptor and as analgesics. They can be used therapeutically to block the peripheral effects of centrally acting pain killers, e.g. to prevent side effects such as constipation and pruritis associated with morphine. The present sequence represents a specific example
                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          form
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                                                                                                                                                                                                                                                                                                                                                                          which acts as mu-opioid receptor ligand
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                                                                                                                          DB 18; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         with morphine. The present sequence represents a of one of the new groups of peptides, of formula
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                                                                                                                                       73.7%;
60.0%;
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The specification describes opioid peptides, in which each of the N atoms in the peptide backbone between respective amino acids is modified by permethylation, perallylation, perethylation, perbenzylation. and pernaphthylation. The peptides inhibit ligand binding to an opioid receptor. Specifically, the peptides inhibit the micro-selective opioid peptide enkephalin. The peptides can be used in vivo diagnostically to localize opioid receptor subtypes. They can be used to treat pathologies associated with other compounds which interact with the opioid receptor system. The peptides are especially useful for blocking the peripheral effects of centrally acting pain killers such as morphine. AAY23005-Y23024 represent opioid peptides of the invention, and are derived from the general sequence given in AAY23004.
                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Opioid peptide, ligand binding, opioid receptor, micro-selective opioid peptide, enkephalin, opioid receptor system; blocking, peripheral effect, centrally acting pain killer, morphine.
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Pred. No. 9.3e+05;
; Mismatches 2;
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                                                                                                                                        ore 28; DB 18;
ed. No. 9.3e+05;
Mismatches 2
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Ac-Arg-Trp-Ile-Gly-Trp-Xaa-NH2 where Xaa amino acid.
                                                                                                                                            Score 28;
Pred. No.
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60.0%;
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Staphylococcus
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Van Strijp
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Best Local S
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                                                                                                                                                                                                                                                                                                                                              Peptides which bind to the DNA binding domain of transcription factor E2F and inhibit cell cycle progression may be useful as research agents to investigate the interaction between E2F and D or the activation of transcription by E2F-1/DP-1 heterodimers. The may also be used for inducing apoptosis and/or cell cycle arrest a cell, particularly for treatment of cancer or other proliferat disorders such as psoriasis and restenosis.
                                                                                                               to transcription factor E2F-1 DNA binding do
                                                                                                                                cycle; DP-1;
disorder;
                                                                                                                                                                                                                                                                                                transcription fact
for the treatment
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                                                                                                                               factor; E2F; E2F-1; cell
apoptosis; proliferative
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Pred. No. 9.3e+05;
Mismatches
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Le progression,
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                                                               standard; peptide;
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                                                                                                                                                                                                                                                                                                                                                                                                                               73.7%;
llarity 60.0%;
Conservative
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                                                                                                                                                                                                                                                                                              ides binding to inhibiting cell
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Best Local
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(CHIPS)
inflammation; cardiovascular disease; central nervous system disease; gastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammatory; cardiant; cerebroprotective; neuroprotective; nootropic; dermatological; gynecological; immunosuppressive; anti-HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               formylated peptide receptor; FPR; neutrophil; monocyte; endothelial cell inflammation; cardiovascular disease; central nervous system disease; gastrointestinal disease; skin disease; genitourinary disease; joint disease; respiratory disease; HIV infection; antiinflammatory; cardiant; cerebroprotective; neuroprotective; nootropic; dermatological; gynecological; immunosuppressive; anti-HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptides derived from chemotaxis inhibiting protein from aureus (CHIPS) having CHIPS activity, useful in treatment of inflammation, cardiovascular, skin and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                joint
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Pred. No. 9.3e+05;
Mismatches
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ilarity 50.0%;
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Synthetic.
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CHIPS activity, useful
tion, cardiovascular, s
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Pred. No. 9.3e+05;
1; Mismatches 2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   composition; primate; lentivirus; n AIDS; SIVmac239; deletion; mutant.
                                                                                                                                                                                                                                                                                                                                                              Combination of peptides derived from chemo Staphylococcus aureus (CHIPS) having CHIPS prophylaxis and treatment of inflammation, kidney diseases
                                                                                                                                                                                                                                                      Gosselaar-de Haas CJC,
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91US-0727494.
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ilarity 50.0%;
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                                                                                                                                    The invention relates to an antigenic composition comprising an isolated primate lentivirus whose genome contains an engineered non-revertible null mutation in the nef gene, or an infectious DNA clone in a carrier. The antigenic composition is used in vaccines against infection by the
                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel SH3 domain-containing TADG5 protein useful for regulating gene replication, as a nutrition supplement, and as a marker for human tissue, or in cell cycle control -
                                                                 containing lentivirus with nef
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Pred. No. 9.3e+05;
Mismatches
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                                                                    compositions
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                                                                                                                                                                                                                                                                                                                                                                                                         AAB49729 standard; peptide;
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                                                                                                                                                                                               AIDS.
                                                                                                             Disclosure; Fig 5A-B;
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                                                                     antigenic
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Desrosiers RC;
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gene deletion
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CC shutting down signalling or cell division. The present sequence
CC represents a peptide identified from a phage display peptide library
CC through biopanning with the TADG5 protein.
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SQ Sequence 7 AA;

Query Match
Best Local Similarity 60.0%; Pred. No. 9.3e+05;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 WXXWH 5
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3, 2003, 11:51:16

Search completed: December Job time: 34.6667 secs

| | | 3 WMDWH 7

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GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd
                   Copyright
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model Š using protein search, OM protein

Run on:

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US-09-912-414-11 38

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1 WXXWHF score Sequence: Title: Perfect

Scoring table:

Gapext BLOSUM62 Gapop 10.0 ,

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283308 seqs, 96168682 residues Searched:

2520 hits satisfying chosen parameters: of Total number

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Database:

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Score 22; DB 2; Le Pred. No. 2.8e+05; 0; Mismatches 3;

Query Match
Best Local Similarity 50.0%;
Matches 3; Conservative

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44444444444444444444444444444444444444	SULT 1 7241 torin - Rohde's les Species: Phyllomed Date: 12-Feb-1993 Accession: S07241 Barra, D.; Falconi BS Lett. 182, 53-5 Title: Rohdei-lito Reference number: 8 Accession: S07241 Molecule type: prof Residues: 1-9 < BAR Superfamily: gastr Keywords: amidated 1/Modified site: py 9/Modified site: an Query Match Best Local Similar Best Local Similar
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A60409
bombesin-like peptide L - frog (Pseudophryne guentheri)
C;Species: Pseudophryne guentheri
C;Species: Pseudophryne guentheri
C;Date: 30-Jan-1993 #sequence_revision 30-Jan-1993 #text_change 18-Aug-2000
C;Accession: A60409
R;Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.;
Peptides 11, 299-304, 1990
A;Title: Six novel tachykinin- and bombesin-related peptides from the skin of the A;Reference number: A60409; MUID:90287814; PMID:2356157
A;Accession: A60409
A;Molecule type: protein
A;Residues: 1-13 <SIM>
C;Superfamily: unassigned animal peptides
C;Keywords: amidated carboxyl end; hormone; neuropeptide; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;13/Modified site: amidated carboxyl end (Met) #status experimental
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C;Species: Homo sapiens (man)
C;Date: 19-Dec-1993 #sequence_revision 17-Mar-2000 #text_change 17-Mar-2
C;Accession: F49033
R;Morita, C;T.; Verma, S.; Aparicio, P.; Martinez, C.; Spits, H.; Brenne
Eur. J. Immunol. 21, 2999-3007, 1991
A;Title: Functionally distinct subsets of human gamma/delta T cells.
A;Reference number: A49033; MUID:92083926; PMID:1684157
A;Accession: F49033
A;Accession: F49033
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-10 < MOR>
A;Cross-references: GB:S72605; NID:9240700; PIDN:AAB20632.1; PID:9240701
A;Note: sequence extracted from NCBI backbone (NCBIN:72605, NCBIP:72606)
C;Keywords: T-cell receptor
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S07204
litorin I - Australian tree frog (Litoria aurea)
C;Species: Litoria aurea
C;Date: 12-Feb-1993 #sequence_revision 12-Mar-1993 #text_change 18
C;Accession: S07204
R;Anastasi, A.; Erspamer, V.; Endean, R.
Experientia 31, 510-511, 1975
A;Title: Aminoacid composition and sequence of litorin, a bombesir
A;Reference number: S07204; MUID:75187011; PMID:1140241
A;Accession: S07204
A;Molecule type: protein
A;Residues: 1-9 <ANA>
C;Superfamily: gastrin-releasing peptide
C;Superfamily: gastrin-releasing peptide
C;Keywords: amidated carboxyl end; neuropeptide; pyroglutamic acid
F;1/Modified site: amidated carboxyl end (Met) #status experiment:
F;9/Modified site: amidated carboxyl end (Met) #status
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); Mismatches 3;
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C; Species: Homo sapiens (man)
C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-May-C; Accession: PH1308
R; Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; Rovera J. Exp. Med. 176, 1577-1581, 1992
A; Title: Predominance of fetal type DJH joining in young children with A; Reference number: PH1302; MUID: 93094761; PMID: 1460419
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R; Liang, O.D.; Ascencio, F.; Fransson, L.A.; Wadstrom, T. Infect. Immun. 60, 899-906, 1992
A; Title: Binding of heparan sulfate to Staphylococcus aurens. A; Reference number: A43848; MUID:92176005; PMID:1541563
A; Accession: A43848
A; Status: preliminary
A; Molecule type: protein
A; Molecule type: protein
A; Note: sequence extracted from NCBI backbone (NCBIP:85442)
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C; Species: Homo sapiens (man)
C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07
C; Accession: PH1324
R; Wasserman, R.; Galili, N.; Ito, Y.; Reichard, B.A.; Shane, S.; R.J. Exp. Med. 176, 1577-1581, 1992
A; Title: Predominance of fetal type DJH joining in young children A; Reference number: PH1302; MUID: 93094761; PMID: 1460419
A; Accession: PH1324
A; Molecule type: DNA
A; Residues: 1-12 < WAS>
C; Keywords: heterotetramer; immunoglobulin
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Pred. No. 2.8e+05;
; Mismatches 2;
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ore 22; DB 2;
ed. No. 4.6e+02;
Mismatches 3
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A; Molecule type: DNA
A; Residues: 1-12 < WAS>
C; Keywords: heterotetramer; immunoglobulin
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                                                                                                                                                                                                                                                                                                                                                from ox
                                                                                                                                                                                                                                   phospholipase A2 (EC 3.1.1.4) precursor - sheep (fragment)
C; Species: Ovis orientalis aries, Ovis ammon aries (domestic sheet)
C; Date: 02-Jun-1988 #sequence_revision 02-Jun-1988 #text_change:
C; Accession: A29169
R; Dutilh, C.E.; Van Doren, P.J.; Verheul, F.E.A.M.; De Haas, G.H
Eur. J. Biochem. 53, 91-97, 1975
A; Title: Isolation and properties of prophospholipase A2 from ox A; Reference number: A94661
A; Reference number: A94661
A; Residues: 1-12 < DUT>
C; Superfamily: phospholipase A2
C; Keywords: carboxylic ester hydrolase; pyroglutamic acid
F; 1/Modified site: pyrrolidone carboxylic acid (Gln) #status exp
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Mol. Biol. Evol. 14, 807-813, 1997
A;Title: The main features of the craniate mitochondrial
A;Reference number: Z17775; MUID:97398704; PMID:9254918
A;Accession: T13818
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                   ore 18; DB 2; Lead. No. 2.8e+05; Mismatches 2;
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Pred. No. 2.8e+03;
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3.3e+03;
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ilarity 66.7%;
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2; Conservative
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A;Accession: PA0099
A;Molecule type: protein
A;Residues: 1-15 <CHO>
A; Molecule type: protein A; Residues: 1-9 < LOR>
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C;Accession: 7
R;Delarbre, C
Mol. Biol. Eve
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C;Species: Gryllus bimaculatus (two-spotted cricket)
C;Date: 26-Jan-1996 #sequence_revision 26-Jan-1996 #text_change 26-Jan-1996
C;Accession: D57444
R;Lorenz, M.W.; Kellner, R.; Hoffmann, K.H.
J. Biol. Chem. 270, 21103-21108, 1995
A;Title: A family of neuropeptides that inhibit juvenile hormone biosynthesis
A;Reference number: A57444; MUID:95403341; PMID:7673141
A;Accession: D57444
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C; Species: Homo sapiens (man)
C; Species: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-Me
C; Accession: PH1322
C; Accession: PH1322
A; Title: Predominance of fetal type DJH joining in young children wit A; Reference number: PH1302; MUID:93094761; PMID:1460419
A; Accession: PH1322
A; Molecule type: DNA
A; Residues: 1-14 < WAS>
C; Keywords: heterotetramer; immunoglobulin
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A; Molecule type: mAY>
A; Cross-references: EMBL: Z47364
A; Note: DNA was also sequenced
C; Keywords: alternative splicing; DNA binding; tramscription factor
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C; Species: Homo sapiens (man)
C; Date: 19-Mar-1997 #sequence_revision 18-Jul-1997 #text_change
C; Accession: S61798; S61880
R; Mayer, K.; Wolff, E.; Clevers, H.; Ballhausen, W.G.
Biochim. Biophys. Acta 1263, 169-172, 1995
A; Title: The human high mobility group (HMG)-box transcription fa; Reference number: S61796; MUID:95367594; PMID:7640309
                        12;
                                                     Indels
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Pred. No. 9.7e+02;
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Pred. No. 1e+03;
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Pred. No. 9e+02;
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S61798
T-cell-specific transcription factor 1
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                   52.6%;
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Best Local Similarity 50.0%;
Matches 2; Conservative
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RESULT 15
PQ0177
neuromedin C - laughing frog
C;Species: Rana ridibunda (laughing frog)
C;Species: Rana ridibunda (laughing frog)
C;Date: 23-Nov-1991 #sequence_revision 23-Nov-1991 #text_change 11-Jan-2000
C;Accession: PQ0177
R;Conlon, J.N.; O'Harte, F.; Vaudry, H.
Bjochem. Biophys. Res. Commun. 178, 526-530, 1991
A;Title: Primary structures of the bombesin-like neuropeptides in frog brain shc A;Reference number: PQ0177; WUID:91315477; PMID:1859413
A;Accession: PQ0177
A;Molecule type: protein
A;Residues: 1-10 <CON>
A;Experimental source: brain
C;Superfamily: gastrin-releasing peptide
C;Superfamily: gastrin-releasing peptide
C;Keywords: amidated carboxyl end
F;10/Modified site: amidated carboxyl end
A;Molecule type: DNA
A;Residues: 1-8 <DEL>
A;Cross-references: EMBL:Y09527; NID:g2340019; PIDN:CAA70718.1; PID:g2340022
C;Genetics:
A;Genome: mitochondrion
A;Note: COI
C;Keywords: mitochondrion
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Best Local Similarity 40.0%; Pred. No. 3.4e+03;
Matches 2; Conservative 0; Mismatches 3; Indels
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Pred. No. 2.8e+05;
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ilarity 66.7%;
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Search completed: December Job tíme : 12 secs

4 WAVGH

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GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd
                Copyright
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sw model using protein search, OM protein

(without alignments).
38.476 Million cell updates/sec 2003, 11:44:55 'n December Run on:

US-09-912-414-11 38 Title: Perfect

9 1 WXXWHF score: Sequence:

Gapext 0.5 BLOSUM62 Gapop 10.0 , Scoring table:

127863 seqs, 47026705 residues Searched:

Total number of hits satisfying chosen parameters:

seg

length: 0 length: 15 Minimum DB Maximum DB Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt 41:* Database Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Gaps

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Indels

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Length

Score 23; DB 1; Pred. No. 1.3e+05; Mismatches

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Similarity 50.0%; 3; Conservative

Query Match Best Local S Matches 3

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WATGHE

RANC RANPI STANDARD; PRT; 11 AA.
P08951;
01-NOV-1988 (Rel. 09, Created)
01-NOV-1988 (Rel. 42, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Ranatensin-C.
Rana pipiens (Northern leopard frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Rania

RESULT 2
RANC_RANPI
ID RANC_R
AC P08951
DT 01-NOV
DT 01-NOV
DT 15-SEP
DE Ranate
OS Rana P
OC Eukary
OC Amphib

P19989 leucophaea P83465 agrocybe ae P82086 litoria cit P56264 litoria xan P80677 chelyosoma P14596 tabanus atr P42341 conopholis P80657 physcomitre P58649 octopus min P30425 bothrops in P38639 mus musculu P82096 litoria rub			7	Vertebrata; Euteleostomi; 1; Bufonoidea; Hylidae;	., Melchiorri P.,	of	OMEDIN B/RANATENSIN	y; Amidation; CARBOXYLIC ACID.
8 1 LCK7 LEUMA 10 1 AEGL AGRAE 10 1 CA12 LITCI 10 1 CAER LITXA 10 1 GONI CHEPR 10 1 HTF TABAT 11 1 RR2 CONAM 15 1 RBS PHYPA 4 1 OCP3 OCTMI 5 1 BPP7 BOTIN 5 1 UF01 MOUSE 6 1 EI01 LITRU	ALIGNMENTS	D; PRT; 9 AA.	Created) Last sequence update) Last annotation update)	ei (Rohde's leaf frog). a; Chordata; Craniata; Vertebrata; E ia; Anura; Neobatrachia; Bufonoidea; Phyllomedusa.	ion; PubMed=3838283; · G.F., Simmaco M., Bossa F	le fi	on: Secreted: : Skin. :s TO THE BOMBESIN/NEUROMEDIN	n. mbesin famil PYRROLIDONE AMIDATION.
34 12 31.6 35 12 31.6 37 12 31.6 38 12 31.6 12 31.6 40 12 31.6 41 12 31.6 42 11 28.9 44 11 28.9 45 11 28.9		LT 1 PHYRO LITR PHYRO STANDARD P08946;	Rel. 09, Rel. 28, Rel. 42,	dei (oa; C hia; Phyl	or, ecret 560; pamer	Erspamer V.; "Rohdei-litorin: a new FEBS Lett. 182:53-56(1	-:- SUBCELLOLAR LOCALI -!- TISSUE SPECIFICITY -!- SIMILARITY: BELONG FAMILY.	PIR; S07241; S07241. InterPro; IPR000874; Bombesir Pfam; PF02044; Bombesin; 1. PROSITE; PS00257; BOMBESIN; 1 Amphibian defense peptide; Bc Pyrrolidone carboxylic acid. MOD_RES 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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MEDLINE=78003546; PubMed=908397;
Anastasi A., Montecucchi P.C., Angelucci F., Erspamer V., Endean R.;
"Glu (OMe) 3-litorin, the second bombesin-like peptide occurring in methanol extracts of the skin of the Australian frog Litoria aurea.";
Experientia 33:1289-1289(1977).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
-!- TISSUE SPECIFICITY: Skin.
                                                                                                                                                                                                       Gaps
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                                       Unpublished results, cited by:
    Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
    Comp. Biochem. Physiol. 77C:99-108(1984).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
-!- SIMILARITY: BELONGS TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE.
TISSUE=Skin secretion;
MEDLINE=75187011; PubMed=1140241;
Anastasi A., Erspamer V., Endean R.;
"Aminoacid composition and sequence of litorin, a bombesin-like nonapeptide from the skin of the Australian leptodactylid frog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bombesin family; Amidation; Methylat
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                                                                                                          InterPro; IPR000874; Bombesin.
Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bombesin family; Amidation.
MOD_RES 11 11
                                                                                                                                                                                     Length
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D7CCC1E862CDC366 CRC64;
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D6C9885A61ADC366
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Mismatches
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         SEQUENCE.
TISSUE=Skin secretion;
MEDLINE=84131098; PubMed=6141890;
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                                                                                                                                                                                  60.5%;
ilarity 50.0%;
Conservative
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Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN;
Amphibian defense peptide; B
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42,
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                                      Nakajima T.;
Unpublished results,
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01-FEB-1994
15-SEP-2003
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P08945;
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01-NOV-1995 (Rel. 32, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Bombesin-like peptide L (PG-L).
Pseudophryne guentheri (Guenther's toadlet).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Myobatrachidae;
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eudicots; Rosidae;
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"Labaditin, a novel cyclic decapeptide from the latex of Jatropha
multifida L. (Euphorbiaceae). Isolation and sequence determination
                                                                                                                                                                                                                                                                                                                                                                                                                                                         skin
                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=Skin secretion;
MEDLINE=90287814; PubMed=2356157;
Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
Roberts J.D., Melchiorri P., Erspamer V.;
"Six novel tachykinin- and bombesin-related peptides from the sl
the Australian frog Pseudophryne guntheri.";
Peptides 11:299-304(1990).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Skin.
-!- TISSUE SPECIFICITY: Skin.
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                                 Indels
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InterPro; IPR000874; Bombesin.
Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bombesin family; Amidation; Pyrrolidone carboxylic acid.
  Length
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edons; core e
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D6DE0D24BD98C366 CRC64;
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Eukaryota; Viridiplantae; Streptophyta; Embryophyt Spermatophyta; Magnoliophyta; eudicotyledons; core eurosids I; Malpighiales; Euphorbiaceae; Jatropha. NCBI_TaxID=3996;
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1.6e+02;
3;
ore 22; DB 1;
ed. No. 1.3e+05;
Mismatches 3
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annotation update)
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50.0%;
  57.9%;
50.0%;
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NCBI_TaxID=30349;
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28-FEB-2003
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P13270;
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the venom of the Mediterranean
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                   ITS THE ACTIVIT
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        FUNCTION: LABADITIN IS AN ACTIVE PEPTIDE WHICH INHIBITS THE CLASSICAL PATHWAY OF COMPLEMENT ACTIVATION IN VITRO. ACTIVISEEMS TO BE BASED ON AN INTERACTION WITH C1.

PTM: This is a cyclic peptide.

DISEASE: LATEX OF THIS PLANT IS USED IN FOLKLORIC MEDICINE TREATMENT OF INFECTED WOUNDS, SKINS INFECTIONS AND SCABIES.

JENCE 10 AA; 1089 MW; D98AAD6362D1B362 CRC64;
                                                                                                                 <u>.</u>
                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
Neogastropoda; Conoidea; Conidae; Conus.
NCBI_TaxID=117992;
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01-NOV-1997 (Rel. 35, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Gonadoliberin II (Gonadotropin-releasing hormone II)
                                                                                                                                                                                                                                                                                                                           TISSUE=Venom;
MEDLINE=21547785; PubMed=11688995;
Massilia G.R., Schinina M.E., Ascenzi P., Polticelli
"Contryphan-Vn: a novel peptide from the venom of the snail Conus ventricosus.";
Blochem. Biophys. Res. Commun. 288:908-913(2001).
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: Expressed by the venom duct
-!- MASS SPECIFICITY: Expressed by the venom duct
-!- MASS SPECTROMETRY: MW=1088.6; METHOD=MALDI.
-!- SIMILARITY: BELONGS TO THE CONTRYPHAN FAMILY.
Toxin; Amidation; D-amino acid.
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8D38676323676EBA CRC64;
                                                                                            Score 21; DB 1; Le
Pred. No. 1.9e+02;
); Mismatches 2;
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Pred. No. 1.3e+05;
); Mismatches 2
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Last sequence update)
Last annotation update)
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Phlebobranchia; Corellidae; Chelyosoma
NCBI_TaxID=71177;
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means of two-dimensional NMR.";
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2; Conservative
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2; Conservative
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16-OCT-2001
28-FEB-2003
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peptide.";
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                                                                                                                                                                                                                the secretion of both luteinizing and follicle-stimulating hormones.
                                                                                                                                                                                                                                                                                                                                               -!- SUBCELLULAR LOCATION: Secreted.
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: GNRH NEURONS LIE WITHIN BLOOD SINUSES CLOSE
THE GONODUCTS AND GONADS IN BOTH JUVENILES AND ADULTS, IMPLYING
THAT THE NEUROPEPTIDE IS RELEASED INTO THE BLOODSTREAM.
-!- MASS SPECTROMETRY: MW=1117.52; METHOD=MALDI.
-!- SIMILARITY: Belongs to the GNRH family.
InterPro; IPR002012; GnRH.
PROSITE; PS00473; GNRH; 1.
                                                                                                                 in a protochordate
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Ranidae; Rana
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TISSUE=Brain;

MEDLINE=91315477; PubMed=1859413;

Conlon J.M., O'Harte F., Vaudry H.;

"Primary structures of the bombesin-like neuropeptides in frog labow that bombesin is not the amphibian gastrin-releasing peptic show that bombesin is soft the second of the second control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
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MEDLINE=96413669; PubMed=8816823; Prakash M.O., Fischer W.H Powell J.F.F., Reska-Skinner S.M., Prakash M.O., Fischer W.H Park M., Rivier J.E., Craig A.G., Mackie G.O., Sherwood N.M. "Two new forms of gonadotropin-releasing hormone in a protocand the evolutionary implications."; Proc. Natl. Acad. Sci. U.S.A. 93:10461-10464(1996).
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1 1 PYRROLIDONE CARBOXYLIC ACID
6 6 INTERCHAIN.
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Pred. No. 1.3e+03;
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Pred. No. 1.3e+03;
Mismatches
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01-NOV-1991 (Rel. 20, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Neuromedin C.
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Amphibia; Batrachia; Anura; Neobatrachia;
NCBI_TaxID=8406;
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Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1
Bombesin family; Amidation.
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ilarity 40.0%;
Conservative
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1135 MW;
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                                                                                              01-NOV-1988 (Rel. 09, Created)
01-NOV-1988 (Rel. 28, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Alytesin.
Alytes obstetricans (Midwife toad).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Archeobatrachia; Discoglossidae; Alytes.
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Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
NCBI_TaxID=4932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Skin.
TO THE BOMBESIN/NEUROMEDIN B/RANATENSIN
                                                                                                                                                                                                                                                                                                       TISSUE=Skin secretion;
MEDLINE=84131098; PubMed=6141890;
Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
"Active peptides in the skins of one hundred amphibian species Australia and Papua New Guinea.";
Comp. Biochem. Physiol. 77C:99-108(1984).
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Pfam; PF02044; Bombesin; 1.
PROSITE; PS00257; BOMBESIN; 1.
Amphibian defense peptide; Bombesin family; Amidation;
Pyrrolidone carboxylic acid.
MOD RES 1 1 AMIDATION.
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Pred. No. 2.7e+03;
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Pred. No. 1.7e+03;
); Mismatches 3;
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29, Last sequence update)
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ribosomal protein L12 (YmL12)
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Grohmann L., Graack H.-R., Kruft V., Choli T
Kitakawa M.;
"Extended N-terminal sequencing of proteins
subunit from yeast mitochondria.";
FEBS Lett. 284:51-56(1991).
SGD; L0002687; MRPL12.
Ribosomal protein; Mitochondrion.
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01-JUN-1994 (Rel. 2
01-JUN-1994 (Rel. 2
Mitochondrial 60S
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TISSUE=Skin
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                                                                                                                                                             01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
FMRFamide-like neuropeptide ALAGDHFFRF-amide.
Mytilus edulis (Blue mussel).
Eukaryota; Metazoa; Mollusca; Bivalvia; Pteriomorphia; Mytiloidea;
Mytiloidea; Mytilidae; Mytilus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P82088;
16-OCT-2001 (Rel. 40, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Caerulein 2.2/2.2Y4.
Litoria citropa (Australian blue mountains tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
Pelodryadinae; Litoria.
                                                                                                                                                                                                                                                                                                                                                                                       "Neuroactive peptides with an RFamide or Famide carboxyl termin
Comp. Biochem. Physiol. 102C:213-222(1992).
-!- SIMILARITY: BELONGS TO THE FARP (FMRFAMIDE RELATED PEPTIDE)
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Amphibian defense peptide; Hypotensive agent; Amidation;
Pyrrolidone carboxylic acid.
MOD_RES
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TISSUE=Skin secretion;

MEDLINE=20057701; PubMed=10589099;

Mabnitz P.A., Bowie J.H., Tyler M.J.;

Mabnitz P.A., Bowie J.H., Tyler M.J.;

"Caerulein-like peptides from the skin glands of the Aus montains tree frog Litoria citropa. Part 1. Sequence det using electrospray mass spectrometry.";

Rapid Commun. Mass Spectrom. 13:2498-2502(1999).

L. Rapid Commun. Mass Spectrom. 13:2498-2502(1999).

-!- FUNCTION: HYPOTENSIVE NEUROPEPTIDE (PROBABLE).

-!- SUBCELLULAR LOCATION: Secreted.

-!- SUBCELLULAR LOCATION: Secreted.

-!- TISSUE SPECIFICITY: Skin dorsal glands.

-!- TISSUE SPECIFICITY: Skin dorsal glands.
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-!- SIMILARITY: BELONGS TO THE GASTRIN/CHOLECYSTOKININ
InterPro; IPR001651; Gastrin.
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Pred. No.
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MEDLINE=93047883; PubMed=1358534;
Walker R.J.;
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"Neuroactive peptides with
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Neuropeptide; Amidation.
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DB 1; 3e+03;

Score 14; DB Pred. No. 3e+ 0; Mismatches

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SEQUENCE.

TISSUE=Brain;

MEDLINE=94298944; PubMed=8026574;

Salzet M., Wattez C., Bulet P., Malecha J.;

"Isolation and structural characterization of a novel peptide relt to gamma-melanocyte stimulating hormone from the brain of the leer to gamma-melanocyte stimulating hormone from the brain of the leer Theromyzon tessulatum.";

Theromyzon tessulatum.";

FEBS Lett. 348:102-106(1994).

-!- SIMILARITY: BELONGS TO THE POMC FAMILY.

PIR; S45698; S45698.

HORMOD RES 11 A4; 1486 MW; 2DB8FACE6409C1E8 CRC64;
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100.0%;
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01-NOV-1995 (Rel. 32, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Melanotropin gamma (Gamma-melanocyte stimulating hormone) (Gammi Theromyzon tessulatum (Leech).
Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea; Rhynchobdellida; Glossiphoniidae; Theromyzon.
NCBI_TaxID=13286;
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16-OCT-2001 (Rel. 40, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Caerulein 4.2/4.2y4.
Litoria citropa (Australian blue mountains tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostor Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
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-!- MASS SPECTROMETRY: MW=1404; METHOD=Electrospray.
-!- SIMILARITY: BELONGS TO THE GASTRIN/CHOLECYSTOKININ F?
InterPro; IPR001651; Gastrin.
PROSITE; PS00259; GASTRIN; FALSE NEG.
Amphibian defense peptide; Hypotensive agent; Amidation;
Pyrrolidone carboxylic acid.
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MEDLINE=20057701; PubMed=10589099;
Wabnitz P.A., Bowie J.H., Tyler M.J.;
"Caerulein-like peptides from the skin glands of the montains tree frog Litoria citropa. Part 1. Sequence using electrospray mass spectrometry.";
Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
-!- FUNCTION: HYPOTENSIVE NEUROPEPTIDE (PROBABLE).
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TISSUE SPECIFICITY: Expressed by the venom duct.
SIMILARITY: BELONGS TO THE A-SUPERFAMILY OF CONOTOXINS. ALPHA-TYPE
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                                                                                                                     Conus geographus (Geography cone).
Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
Neogastropoda; Conoidea; Conidae; Conus.
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Biochemistry 23:2796-2802(1984).
-!- FUNCTION: Alpha-conotoxins act on postsynaptic bind to the nicotinic acetylcholine receptors (
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DEEE831C39297EBD
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Gray W.R., Luque F.A., Galyean R., Atherton E
Stone B.L., Reyes A., Alford J., McIntosh M.,
Cruz L.J., Rivier J.;
"Conotoxin GI: disulfide bridges, synthesis,
                                     01, Created)
01, Last sequence update)
41, Last annotation update)
                                                                                                                                                                                                                                                    SEQUENCE.
MEDLINE=81191854; PubMed=7014556;
Gray W.R., Luque A., Olivera B.M., Barrett J. Peptide toxins from Conus geographus venom. J. Biol. Chem. 256:4734-4740(1981).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIR; A01783; NTKN2G.
HSSP; P56973; 1B45.
Postsynaptic neurotoxin; Neurotoxin; Toxin;
Acetylcholine receptor inhibitor; Amidation
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PRT;
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